



The Official Journal of the Foundation For Amateur Radio, Inc.

JULY 1996



**FCC Highlights • ARRL Report • VE Exams Schedule
Public Service Report • DX Column • Regional Hamfests
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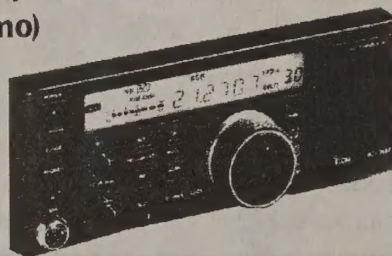
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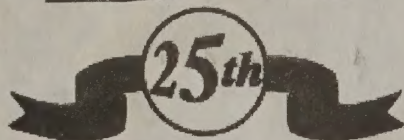
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In this month's issue . . .

Regular & Special Features:

Editor's Corner	5	Fauquier Amateur Radio Association	40
FCC Highlights	7	Green Mountain Repeater Association . . .	41
Special Bulletin: Bands Threatened!!	11	Hanover Area Hamming Association	41
ARRL Report	13	Herndon Repeater Group	42
Elmer's Corner	16	Historical Electronics Museum ARC	43
DX DX DX	17	Laurel Amateur Radio Club	44
Traffic Fun	18	MADRAS	44
Adopt-A-School Program	19	Maryland Mobileers Amateur Radio Club .	45
Examination Schedules	22	Metrovision Amateur TV Club	47
FAR Meeting Minutes - May	28	Mid-Atlantic DX and Repeater Association	47
Shack Sales	59	Montgomery Amateur Radio Club	48

Club Columns:

Alexandria Radio Club	35	Northern Virginia FM Association	50
Amateur Radio Research & Development . .	35	Prince George's Wireless Association . . .	51
Anne Arundel Radio Club	36	QCWA Shenandoah Valley Chapter #137 .	51
Antietam Radio Association	37	QCWA Vic Clark Chapter #91	52
Capital City Amateur Radio Society	38	Shenandoah Valley Amateur Radio Club . .	53
Carroll County Amateur Radio Emerg. Team	38	Southern Maryland Amateur Radio Club . .	54
Central Maryland Amateur Radio Club	39	T-MARC	55
Columbia Amateur Radio Association	40	Vienna Wireless Society	56

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Regional Hamfests and Other Events

July 4	Harrisburg RAC - Bressler, PA
July 7	Murgas Amateur Radio Club, Dallas, PA
July 13	Columbia Area ARC - Lancaster, PA
July 14	Mid-Atlantic Amateur Radio Club, Kimberton, PA
July 14	North Hills ARC - Pittsburgh, PA
July 20	Jonestown Mtn Repeater Assn
July 20	Utica ARC - Frankfort, NY
July 21	Indiana County Amateur Radio Club, Indiana, PA
July 27	Columbia Montour Amateur Radio Club, Eerwick, PA
July 28	BRATS - Timonium, MD
July 28	Genesee RA - Batavia, NY
August 4	Delaware-Lehigh ARC - Easton, PA
August 4	Winchester Hamfest, Berryville, VA
August 12	Tompkins Co. ARC - Dryden, NY
August 15/18	International EME Convention - Bowie, MD
August 18	Sussex ARA/Delmarva - Georgetown, DE
August 25	Mid-Atlantic DX & Repeater Assn., Brunswick, MD
September 7	Radio Assn of Erie - Erie, PA
September 8	Foundation for Amateur Radio FAR Fest
September 8	Butler Co. ARA - Butler, PA
September 15	Wheeling Hamfest & Computer Show, Wheeling, WV
September 21	Buffalo Hamfest - Hamburg, NY
September 21	Western NY Section Convention - Hamburg, NY
September 22	South Jersey Radio Assn - Mt. Holly, NJ
September 28	ARA of the Southern Tier - Horseheads, NY
October 13	Columbia Amateur Radio Assn. Hamfest, West Friendship, MD
October 20	RF Hill ARC - Sellersville, PA
October 27	Penn Wireless Assn - Newtown, PA
October 27	Mason-Dixon - Westminster, MD



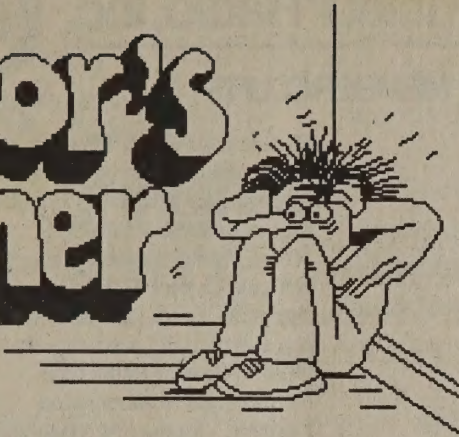
(Photo by Jim Wilson, K4BAV)

On The Cover

Charles A. Stay, W4HE, sits at his ham station one last time before donating his equipment to the Vienna Wireless Association. Chuck, age 89, and his wife, Maria, decided to move from his home in Falls Church into a retirement home in Alexandria. Chuck was first licensed in 1921 with the call 2CQW. A retired Naval officer, Chuck has been a member of the Alexandria Radio Club since the late 1950's. Chuck will remain active from his new location at the Goodwin House East via the 2 meter ARC repeater.

Editor's Corner

By John Queen
KAØSEY



Award chasing is a fantastic way to compete against yourself and others while honing your operating skills. Some of the more popular operating awards include the Worked All States (WAS), Worked all Counties (WAC), the DX Century Club award (DXCC), and the Worked all Zones (WAZ) award. There are dozens of different operating awards to pursue. The *ARRL Operating Manual* describes most US and international awards available.

However, there is one award that doesn't exist, but perhaps should be available. I call it the "Worked All Bozos" (WAB), and it would be an easy award to get. Simply tune your HF rig to 14.313 on the 20 meter band and you'll find plenty of potential contacts anytime day or night.

If you're not familiar with the communication activity on 14.313, tune it in one night and you'll quickly find out that this frequency is the home of amateur radio gone amok.

A small number of clown operators use this frequency to throw pointed barbs at each other, use profanity freely, make animal noises, belch and moan, and create a general ruckus for any one trying to make normal contacts.

Under my rules, to earn the Worked All Bozos award, all you need to do is jump into the fray. By working any of the clowns on the frequency, you become a part of the problem, not the solution.

These operators have absolutely no regard for the FCC Part 97 rules, and will not hesitate to let you know that. Some of these operators are probably operating without a license, but it is clear that all of them are operating without a brain.

I find it disheartening that amateur radio has operators among its ranks who are truly amateurish. Who are these brainless bozos that abuse the privilege of the airwaves? With all of the communication potential that amateur radio has to offer, it's a shame that a handful of people feel the need to congregate on 14.313 and transmit 100 watts of immaturity. These are the bad apples of the ham radio lot. They are an embarrassment to themselves, to other ham operators, and to the entire ham radio community.

I also find it disheartening that although the FCC has been notified of the 14.313 problem countless times during the past few years, the problem still persists. I'm convinced that even with government cutbacks, downsizing, and rightsizing, the FCC should take a more proactive and visible stance in identifying and prosecuting these verbal jerks of the airwaves.

The Worked All Bozos award may never exist on paper, but it certainly exists in the minds of hams who have to share the bands with a mindless few.

73's, de KAØSEY, John



MEMBER CLUBS

Adams County Amateur Radio Society
Alexandria Radio Club
Amateur Radio Research and Develop. Corp.
AMSAT - Radio Amateur Satellite Corporation
Anne Arundel Radio Club
Antietam Radio Association, Inc.
ARINC Amateur Radio Club
Arlington Amateur Radio Club
Baltimore Amateur Radio Club
Baltimore Radio Amateur Television Society
Capital City Amateur Radio Society
Capital Hill Amateur Radio Society
Carroll County Amateur Radio Club
Central Maryland Amateur Radio Club
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Culpeper Amateur Radio Association
D-MARC - Digital Mid-Atlantic Radio Council
Department of State Amateur Radio Club
Explorer Post #80 - Amateur Radio
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Frederick Amateur Repeater Group
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Kent Island Amateur Radio Club
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Maryland Emergency Phone Net
Maryland FM Association
Maryland Mobileers Amateur Radio Club
Mercury Amateur Radio Assn., NE Area
Metropolitan Communications Network
Metrovision Amateur TV Club

Mid-Atlantic DX & Repeater Assn.
Montgomery Amateur Radio Club
Montgomery Auxiliary Communications Service
Moose Amateur Radio Club
Mount Vernon Amateur Radio Club
National Capitol ARES Council
National Capitol DX Association
Naval Research Laboratory Radio Club
NOAA Amateur Radio Club
North Point FM Association
Northern Virginia FM Association
Northern Virginia Radio Club
Ole Virginia Hams Amateur Radio Club
Opequon Radio Society
Pentagon Amateur Radio Club
Potomac Area VHF Society
Potomac Valley Radio Club
Prince George's Wireless Association, Inc.
Prince George's County ARES/RACES
Quarter Century Wireless Association, Inc.
 Baltimore Chapter #20
 Del-Mar-VA Chapter #150
 Shenandoah Valley Chapter #137
 Vic Clark Chapter #91
 Washington Chapter #23
Rock Creek Amateur Radio Association
St. Mary's County Amateur Radio Association
Shenandoah Valley Amateur Radio Club
Southern Maryland Amateur Radio Club
Southern Patuxent Amateur Radio Club
Stafford Amateur Radio Assn.
Sterling Park Amateur Radio Club
Summit Amateur Radio Association
Tri-County Amateur Radio Club
T-MARC, Middle Atlantic Repeater Council
Vienna Wireless Society
Voice of America Amateur Radio Club
Waldorf Repeater Support Group
Washington Adventist Amateur Radio Assn.
Washington Area Young Ladies ARC
Woodbridge Wireless, Inc.

NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. **Visitors are always welcome!** The next meeting will be held July 10 at the Lee Center, Alexandria, Virginia. Take Capitol Beltway to Exit 1 (US 1 North). North to the second traffic light, left on Gibbon Street to Fayette. Left on Fayette to dead end at Lee Center Parking Lot. The meeting is conducted in the conference room near the main office of the center.

**Talk-in on
146.55**



FCC Highlights

By Jack Kelleher.
W4ZC

FCC RFI Policy

Last month we reviewed the news concerning cessation of the FCC's pilot RFI program in Tampa Florida, and the reasons therefor. Below is a copy of the official Public Notice on the new policy, which includes FCC Bulletin CIB-10 (CIB is the FCC's Compliance and Information Bureau). The information was released April 5, but it's "durable" and useful, so I decided to publish it, albeit a bit late. In view of the content of the CIB Bulletin, in particular, it may be well for Radio Amateurs to obtain several copies of the Bulletin, which can be given to individuals who complain about interference from the amateur's transmissions.

FCC Policy for Handling Complaints of Interference to Home Electronics Equipment

"Each year the FCC receives thousands of complaints of interference to televisions, radios, audio systems, telephones, and other home electronics equipment. In most instances the FCC cannot resolve the problem because the cause of the interference is the design or construction of these products and not a violation of any FCC rule. "To help consumers deal with these interference problems, basic information concerning interference solutions is now available on the Internet through the FCC Compliance and Information Bureau Home Page. This basic information includes the CIB Interference Handbook and the CIB Telephone Interference Bulletin. The CIB Interference Handbook includes a list of equipment manufacturers who provide

specific assistance with interference problems. The list also is available through the Commission's Fax on Demand on 202-418-2830. Callers should request document number 6804.

"Involving dealers and manufacturers in the resolution process should give them knowledge of the problems and provide both the opportunity and incentive to protect their products through customer service.

"At the same time, however, it should be emphasized that the Compliance and Information Bureau will continue to take appropriate enforcement action where it has been determined that the interference is caused by violations of the Communications Act or the Commission's rules or policies.

FCC Bulletin CIB-10 What to do if you hear radio communications on your telephone

"Interference occurs when your telephone instrument fails to 'block out' a nearby radio communication. Potential interference problems begin when the telephone is built at the factory. "All telephones contain electronic components that are sensitive to radio. If the manufacturer does not build in interference protection, these components may react to nearby radio communications. Telephones with more features contain more electronic components and need greater interference protection. If you own an unprotected telephone, as the radio environment around you changes, you may sometimes hear unwanted radio communications.

"Presently, only a few telephones sold in the United States have built-in interference protection. Thus, hearing radio through your telephone is a sign that your phone lacks adequate interference protection. This is a technical problem, not a law enforcement problem. It is not a sign that the radio communication is not authorized, or that the radio transmitter is illegal.

Continued next page

"Because interference problems begin at the factory, you should send your complaint to the manufacturer who built your telephone. Use the attached complaint card to request help. Follow the instructions on the next page.

"You can also stop interference by using a specially designed "radio-proof" telephone, available by mail order. A recent FCC study found that these telephones, which have built-in interference protection, are a very effective remedy. "Interference problems in telephones can sometimes be stopped or greatly reduced with a radio filter. Install this filter at the back of the telephone, on the line cord, and/or at the telephone wall jack. Radio filters are available at local phone product stores and by mail order.

"To get started, follow these steps: If you have several telephones, or accessories such as answering machines, unplug all of them. Then plug each unit back in, one at a time, at one of your wall jacks. Listen for the radio communication. If you hear interference through only one telephone (or only when the answering machine is plugged in), then the problem is in that unit. Contact the manufacturer of that unit for help.

"Alternatively, simply stop using that unit, replace it with a radio-proof model, or install a radio filter. (NOTE: Only a very small percentage of interference problems occur in the outside telephone lines. Your local telephone company can check for this type of problem).

"Next, it's important to follow through and contact the manufacturer. Telephone manufacturers need to know if consumers are unhappy about a product's failure to block out radio communications. Also, the manufacturer knows the design of the telephone and may recommend remedies for that particular phone.

"To file a complaint, cut out the card below along the dotted line. Fill in the card and mail it to the telephone manufacturer. To help the manufacturer select the right remedy, mark on the

complaint card what type of radio communication the phone is receiving. You can identify the type of radio communication by listening to it. There are three common types:

"1) AM/FM broadcast radio stations. Music or continuous talk distinguishes this type of radio communication. The station identifies itself by its call letters at or near the top of each hour.

"2) Citizen's Band (CB) radio operators. These radio operators use nicknames or "handles" to identify themselves on the radio. Usually, the CB operator's voice is clearly heard. You may also hear sound effects or other noises.

"3) Amateur ('ham') radio operators. Amateur radio operators are licensed by the FCC. They use call letters to identify their communications. The amateur's voice can be heard but may be garbled or distorted.

"Cordless telephones are low-power radio transmitter/receivers. They are highly sensitive to electrical noise, radio interference, and the communications of other nearby cordless phones. Contact the manufacturer for help in stopping interference to your cordless telephone.

"Final note: Current FCC regulations do not address how well a telephone blocks out radio communications. At present, FCC service consists of the self-help information contained in this bulletin.

"The FCC strongly encourages manufacturers to include interference protection in their telephones as a benefit to consumers. The telephone manufacturing industry has begun to develop voluntary standards for interference protection. The FCC will continue regular meetings with manufacturers and will closely track the effectiveness of their voluntary efforts.

"If you are not satisfied with the manufacturer's response, contact the Electronic Industries

Continued next page

Association, 2500 Wilson Boulevard, Arlington, Virginia 22201, phone (703) 907-7500.

FCC DENIES W5YI PETITION TO END ONE-WAY TRANSMISSIONS

Citing overwhelming opposition, the FCC has denied a Petition for Rule Making, RM-8626, filed last year by Frederick O. Maia, W5YI, that would have prohibited one-way transmissions of bulletins and code practice—such as those aired by W1AW—on frequencies below 30 MHz. Maia had argued that such transmissions were outmoded and that some one-way, broadcast-type transmissions have interrupted two-way communications already in progress. Maia publishes the commercial newsletter the W5YI Report, manages the W5YI-Volunteer Examiner Coordinator and publishes training materials for amateurs.

When he filed his petition, Maia expressed concern over the level of anger directed at certain one-way transmissions. “The proliferation of these stations has caused chaos in the amateur community that has now reached crisis proportions,” he said.

The ARRL said that Maia’s arguments were overstated and inflammatory, and the League urged the FCC “in the strongest possible terms” to deny or dismiss the petition without further consideration.

The League cited W1AW’s 65 years of free service to amateurs; other countries whose amateur societies also conduct informational bulletins on the air; the absence of any allegations that W1AW creates any significant interference to ongoing amateur communication; and the value of W1AW’s bulletins in alerting amateurs to emergency situations. The League said that “any on-air anger perceived by Maia” ought to be the subject of FCC enforcement action, not rules changes, saying such situations were the direct result of the Commission “allowing abuses to continue for months and years” rather than addressing them in a timely manner in the context of the existing rules.

The ARRL also said that W1AW code practice as a free alternative to Maia’s retail sale of code practice products “is sufficient rebuttal to the allegation that the code practice has outlived its usefulness’.”

During the comment period, the FCC said it received 371 comments opposing Maia’s request and 20 comments supporting it. While acknowledging some disagreement about the propriety of one-way transmissions on HF bands, the Commission said the overwhelming opposition to Maia’s petition “persuades us that the amateur service community continues to view the one-way information bulletins and the text for telegraphy practice to be of great value to the service.”

FCC Establishes Family Radio Service (ARRL Letter May 16th)

The Federal Communications Commission amended Part 95 of its rules May 10 to establish a new, unlicensed personal radio service, to be called the Family Radio Service.

This service was created in response to a petition filed by the Radio Shack Division of Tandy Corporation, requesting that the Commission establish a new radio service aimed at providing small groups with an affordable and convenient means of direct, short range (up to one-half mile), two-way voice communication. FRS radios would use 14 channels in the 462 to 468-MHz band. Transceivers would have to be FCC-certified.

The Commission suggests the FRS could be used by hunters, campers, hikers, bicyclists and other outdoor enthusiasts to keep in contact with one another during outings.

It could also be used by parents to keep in touch with children playing in the neighborhood, or families or friends to keep in contact with one another while at shopping malls, sporting events, amusement parks and similar locations.—FCC

Continued next page

The Man Behind the Story

The preceding item is the final action on a petition filed by Radio Shack in July 1994, and first reported in this column in September 1994. In the October 1995 column we summarized the history of the citizens radio service, mentioning that the initial allocation to the General Mobile Radio Service (GMRS) at 460-470 MHz, in 1947, was due in part to the efforts of Al Gross, W8PAL, who had developed and demonstrated a UHF handheld transceiver.

Al Gross was awarded the VWOA (Veteran Wireless Operators of America) Marconi Memorial Gold Medal for Achievement at the VWOA's Annual Banquet on May 17, 1996; excerpts from the biography accompanying that award are quoted below.

"After completing college with a BSEE degree, Al worked in his small manufacturing firm on wired intercom systems. . . . Before World War II Al had developed a high frequency, hand-held walkie-talkie. During the war, Gross worked with the OSS (forerunner of the CIA) to develop a compact, portable two-way radio transceiver that was used for clandestine operations behind enemy lines. The transceiver was used for ground-to-air communications between agents and pilots in high-flying aircraft. This secret operation was declassified in 1976.

"Shortly before the end of the war, Al met George Stirling, head of the FCC Radio Intelligence Division, who suggested showing the OSS hand-held walkie-talkies to the FCC Chairman and the Commissioners. Impressed by the demonstration, FCC Commissioner E. K. "Jack" Jett wrote the article Phone me by Air (Saturday Evening Post, July 28, 1945) and personal two-radio was born.

"After the war Gross formed his own company to market his inventions. He received two FCC licenses in June 1945 for on-air testing and development of life-saving equipment for emergency use by the U.S. Maritime Commission and the War Shipping Administration. The U.S. Coast Guard, in 1948, contacted Gross' company to manufacture a version of this same hand-held transceiver, model TRC156."

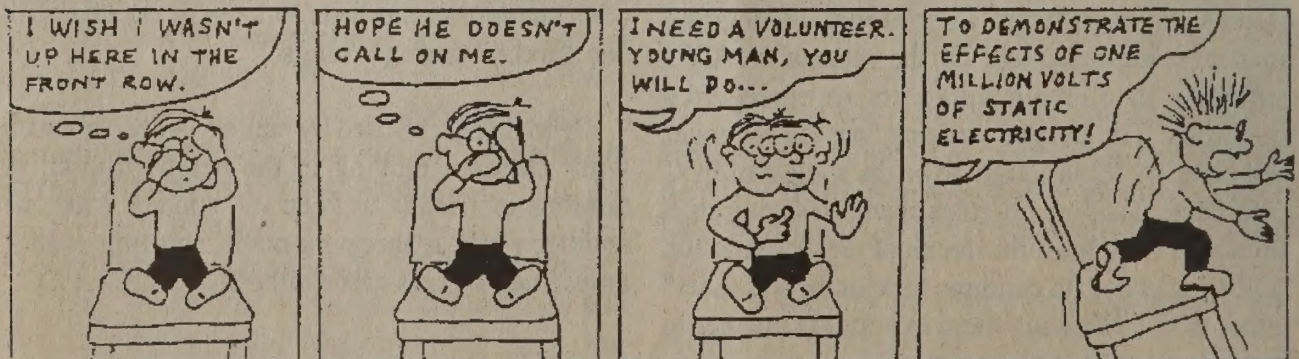
Among his many awards over the years, Al prizes his honorary permanent membership in the ITU, conferred personally by Dr. Pekka Tarjanne, Secretary-General of the ITU, during the 9th Personal Radio Congress in Geneva on May 21, 1995.

We congratulate Al on his achievements and his well-deserved fame.

John J.(Jack) Kelleher
Telecom Consultant (retired)
(301) 924-1605

ELMER

By Rich Regent, K9GDF





2 Meter AND 70 cm BANDS THREATENED! THIS IS NO JOKE!!!

Reprinted with permission from the
ARRL New England Division Special Bulletin 96-9A

ARRL HAS JUST LEARNED THAT IN PREPARATION FOR THE WORLD RADIO CONFERENCE IN 1997, REPRESENTATIVES OF THE LOW-EARTH-ORBIT (LEO) INDUSTRY PROPOSED A LIST OF CANDIDATE FREQUENCY BANDS FOR REALLOCATION TO, AND EXCLUSIVE USE OF THE MOBILE SATELLITE SERVICE. THIS LIST INCLUDES 144- 148 MHZ (THE CURRENT AMATEUR 2 M BAND) AND 420-450 MHZ (THE CURRENT AMATEUR 70 CM BAND)!

IF THIS EFFORT WERE TO BE SUCCESSFUL, IT WOULD MEAN THE END OF AMATEUR OPERATIONS ON THESE TWO MOST HEAVILY UTILIZED AMATEUR VHF/UHF BANDS!

Below is the text of Dave Sumner's (K1ZZ) July QST editorial. ARRL, as the principal representative of Amateur Radio in Washington, is actively pursuing this issue as this bulletin is being written. Dave's call to action is serious!! We could lose these bands if we do not take action now!!

WRITE NOW!!!!

Get out a pen and paper, or boot up your computer. There's work to be done! Your help is needed to defend two meters and 70 cm. Yes, that's right — the two most popular and crowded amateur VHF/UHF bands! But don't panic, and don't "go ballistic."

Here's what's happening, and what you can do about it.

The United States is preparing for the 1997 ITU World Radiocommunication Conference, WRC-97. In the past, the public has been able to participate in the preparations for such conferences by responding to FCC Notices of Inquiry. In March, the FCC announced a streamlining of its International Bureau's preparatory processes for WRCs. Under the new scheme, the NOIs have been eliminated in favor of increased emphasis on WRC Advisory Committees.

For WRC-97, a series of Informal Working Groups (IWGs) of the Advisory Committee has been created to address specific agenda items. The output of each IWG will go directly to a joint FCC-NTIA-Department of State Steering Committee of the Advisory Committee. There, draft proposals as received from the IWGs will be reviewed and forwarded to the FCC for possible release as preliminary U.S. proposals for public comment.

In announcing the streamlined WRC preparatory process, the FCC tried to reassure those who might be concerned about reduced opportunities for public participation: "Interested parties should note that input to the Advisory Committee may be sent at any time directly to the Chair of the WRC-97 Advisory Committee; the Chairs of the Advisory Committee's Informal Working Groups; Cecily C. Holiday, the FCC's federal officer of the WRC-97 Advisory Committee, on C. Ladson, the alternate federal officer."

Continued next page

Hold that thought while we shift gears to the substance of the issue.

One of the WRC-97 agenda items includes consideration of possible additional frequency allocations for the mobile-satellite service. So-called "little LEOs," low-earth orbit satellites below 1 GHz, already have allocations. Their proponents claim these are inadequate and are trying for more. The needs of little LEOs are being addressed in IWG2A, chaired by Warren Richards of the Department of State. The ARRL technical relations staff participates in IWG-2A to represent Amateur Radio interests.

At the May 7 IWG-2A meeting, an industry representative proposed a list of "candidate bands" for little LEOs. The list includes a number of bands that would negatively impact existing services, and does not include others that would be technically more feasible but to which strong objection from incumbents could be expected — the point being that some political, rather than purely technical, judgment already has influenced the list.

Incredibly, 144-148 and 420-450 MHz were included on the list! This is the first time in memory that another service has been proposed for the two-meter amateur band. We must make sure it is also the last time.

We do not need to explain to ARRL members the extensive use that is made of these bands by amateurs. The two bands provide the backbone of our local public service communications effort. Voice and data, mobile and fixed, even television — the list of present amateur uses is a long one, and of future uses is even longer. Both are already used for satellite services and for moonbounce and extended-range terrestrial operations requiring extremely sensitive receivers and high levels of effective radiated power.

Apparently we did need to explain all this to the little LEO industry representatives, so we did

just that — both at the meeting and in a letter on May 15. We also explained that we had to regard the matter as extremely serious. No one with the slightest background in radiocommunication could possibly believe that a mobile-satellite service could be introduced into either band without disrupting existing and future amateur operations. Therefore, we said, if we did not receive assurance that they would be taken off the list of candidate bands by the deadline for this issue of QST, we would have no choice but to bring the matter to the attention of the entire membership.

The response we received was unsatisfactory. In effect, we were told the little LEO industry would consider our views but that until their spectrum needs are satisfied, all bands must remain under consideration.

So, this is a call to action. We must get across to the industry and government participants in IWG-2A that the 144-148 MHz and 420-450 MHz bands cannot be considered as candidates for mobile-satellite services. We need to drive the point home so forcefully, with so many grassroots responses, that no one is ever tempted to try this again.

Which brings us back to that invitation for "interested parties" to send input "at any time." There's no time like the present! Here are the key addresses, including those of the mobile-satellite industry folks who seem to have started the ruckus:

Cecily C. Holiday, International Bureau, FCC, Washington, DC 20554; choliday@fcc.gov; FAX (202) 418-0748.

Warren G. Richards, Chair, IWG-2A, Department of State, CIP 2529, Washington, DC 20520; richardswg@ms6820wpoa.usstate.gov; FAX (202) 647-7407.

Tracey Weisler, FCC Rep., IWG-2A, International Bureau, FCC, Washington, DC 20554; tweisler@fcc.gov; FAX (202) 418-2824.

Continued on page 15



American Radio Relay League Report

By John Swafford,
W4HU

The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

ARRL Museum Accepts Clock with a History

The ARRL Museum of Amateur Radio at Headquarters has received a clock that's emblematic of a time when transatlantic QSOs via Amateur Radio were still a dream. Past League Secretary K.B. Warner, as W1BHW, won the clock in a wager over the transatlantic contacts. The specific nature of the bet is not clear, but an inscription on a brass plaque affixed to the top of the timepiece says: "Kenneth B. Warner. From W. Witt Burnham. To settle a bet on the success of the Anglo-American Amateur Transmissions. December 1923, F.B.O.M." Warner served as secretary (and later as managing secretary, editor) from before 1920 until 1948. The first transatlantic two-way ham radio contact took place on November 27, 1923, when ARRL Traffic Manager Fred Schnell, 1MO, in West Hartford, Connecticut, communicated for almost two hours with Leon Deloy, 8AB, in Nice, France. Later that same night, John L. Reimartz, who held the call signs 1XAM and 1QP in South Manchester, Connecticut, also worked 8AB. The contacts were on 110 and 115 meters (just below 3 MHz), then considered "a short wave." This milestone in Amateur Radio history was documented in QST for January 1924.

The clock, made by Hamilton & Co of London, has remained in Warner's family. His daughter, Bettyjean "BJ" Warner Averitt of Lakewood, Colorado, recently presented it to Membership Services Manager Chuck Hutchinson, K8CH, for display in the ARRL Museum. She also gave the museum her father's station guest book. Among those who had signed when they visited were such ham radio luminaries as Byron Goodman, W1DX; Don Mix, W1TS; Ed Tilton, W1HDQ; Don Wallace, W6AM; ARRL co-founder and QST editor Clarence Tuska; and The Old Man himself, Hiram Percy Maxim, W1AW.

Bj said she recalls a very exciting childhood in a household where visitors from other countries were commonplace. Although interested in ham radio, she never got her license, although her son once did. Her brother's middle name, Maxim, reflects the family's ham radio associations.

"We are very pleased to accept the clock, and are grateful for the generosity of Mr Warner's family," Hutchinson said. The clock will join other K.B. Warner memorabilia. The museum also has on display other items associated with the 1921 and 1923 transatlantic tests. Hutchinson says he'd like to pair the clock with the Royal Order of Transatlantic Brass Pounders certificate issued to Warner for the historic radio contact with 8AB in France.

Accompanying Bj was Frances Beekley Haviland, the daughter of past QST advertising manager F. Cheyney Beekley, W1GS. He developed the original QST advertising policy that, for the most part, still remains in effect. Hiram Percy Maxim's rolltop desk remains in Beekley's family.

Wisconsin "Rockets for Schools" Launch a Success

Despite marginal signals from an onboard ATV transmitter, the May 4 launch from Sheboygan, Wisconsin, of an ATV-carrying rocket is being

Continued next page

considered at least a qualified success by Bryan Suits, WB8WKN, who was in charge of the ATV payload. The 11-foot-long Super Loki sounding rocket was sent into the air over Lake Michigan, as part of the Wisconsin Rockets for School Project, a program to stimulate interest and excitement in mathematics and science. Launch-day weather began as "very iffy," said Suits, a physics professor from Houghton, Michigan. But, he said the sky cleared up and winds abated by the 2 PM (CDT) launch time.

"The payload worked as planned," Suits said, although received signals were "on the poor side." Suits speculates the noisy signal was the result of antenna damage that occurred. "But we did indeed get signals," he said. Before the launch, Suits has said he'd consider the project a success if the ATV setup transmitted just one good frame back to earth.

A frame-by-frame analysis of the video indicates the starlute (a special high-altitude parachute-type device) connection was probably severed during ejection. As a result, "we got a lot of rapid tumbling motion," Suits explained. He said the payload was tumbling a few rotations per second. The video Suits received on the ground showed the horizon and some of Earth's curvature, but "no identifiable features" because of the rapid rotation of the payload, he explained.

Audio telemetry signals received on the ground indicated that all the electronics survived the mistreatment on the way up. "I am very pleased that the payload worked so well on the first try!" he said. Onboard devices measured battery voltage as well as internal and external temperatures. The devices reported an internal temperature of 0 degree C and an external temperature of -50 degrees C. Prior to the launch, Suits had worried about overheating of the batteries. An altimeter failed to operate, so Suits is not sure if the rocket actually reached the planned altitude of nearly 50 miles.

The payload was not recovered. "It's probably at the bottom of Lake Michigan by now," Suits

said. "We will be doing some digital analysis of the signals and compiling the telemetry from our different receiving stations," Suits said, adding that some already are talking about attempting another launch next year.

Overall, Suits reports "a good time was had by all and students of all ages enjoyed the event. A lot of dignitaries were there as well, and say what Amateur Radio could do."

An ATV balloon launch was under way at the same time, and Suits says quite a few who were booking at the balloon signal thought they were seeing the signal from the rocket. Amateur Radio also played a role in ground communication, range safety and tracking on both VHF and HF.

The Aerospace States Association sponsored the launch. "We're grateful to the ASA for giving us this opportunity to help with this project," Suits said.

Lack of Sunspots Makes Predictions Chancy

Propagation forecaster Tad Cook, KT7H, in Seattle, Washington reports no sunspots during the period April 25-May 1, except for April 28, when the number rose to 13. Solar flux on each day was below the average value for the previous 90 days, which was 71 at the start of the reporting period, and 70 at the end. "All of this shows a continued downward trend in solar activity," he said.

But, because activity is so flat, it's difficult to predict changes in activity over the next few weeks, since such predictions are always based on a solar rotation with activity recurring every 28.5 days. Cook says solar flux was expected to increase slowly to the mid-70s around May 11, and drop below 70 after May 18.

Look for disturbed conditions around May. Because of lengthening days, low-frequency DX is declining and 20 meters should be better for DX, even with the low solar activity.

Amateur Yields Ham Ticket for Life

Irvin J. Foret, KB5UJD, of Metairie, Louisiana, whose Technician Plus license was suspended by the FCC following allegations of interference to Amateur Radio operations in the New Orleans area, has reached a settlement with the FCC to end its proceedings against him.

Foret has agreed to immediately surrender his Amateur Radio license for life and permanently divest himself of all electronic equipment capable of transmitting on the ham bands.

In addition, Foret has agreed to refrain for life from applying for any FCC license or permit, regardless of the service; from participating as a third party in any communication in the Amateur Radio service; and from transmitting on CB, Foret also has agreed to pay \$500.

ARRL Executive Vice President Dave Sumner, K1ZZ, was pleased with the outcome.

"With regard to cleaning up the New Orleans situation, while the ball game isn't over, it seems to us that in coming to such a favorable settlement with Mr Foret, the FCC has hit a crucial late-inning home run."

Jerry Freeman, W4JJ, SK

Jerry Freeman, W4JJ, of Virginia Beach, Virginia, died May 18. He was 63. He was very well known in the amateur radio community, Jerry worked for the FCC for 35 years, many of them as engineer in charge of the FCC's Norfolk, Virginia field office. He retired in August 1995. Among those who knew Jerry as a friend was Dennis Terribile, WR4I, formerly of Norfolk. He called him "a great Ham Radio advocate".

In Brief

*The Salvation Army plans to use Amateur Radio to enhance the capabilities of its emergency disaster services program within its Eastern Territorial Community Relations and Development Department Ham gear in the territorial headquarters at West Nyack, New York, will permit communication within affected areas anywhere in the eastern territory and beyond, as necessary. The Salvation Army's eastern territory includes the 11 northeastern states and Puerto Rico. The eastern territory will join the Salvation Army's central territory as part of the national Salvation Army Team Emergency Radio Network (SATERN), headed by Maj. Patrick McPherson, WW9E. The territorial headquarters earned their ham tickets following training sessions by Steven Koeper, KF2JA, and Abraham Gittler, K2YHM.

HAM BANDS THREATENED, from page 12

Mary Kay Williams, Final Analysis, Inc., 7500 Greenway Center, Ste. 1240, Greenbelt, MD 20770; FAX (301) 474-3228.

Leslie Taylor, LTA, 6800 Carlynn Court, Bethesda, MD 20817; ltaylor@lta.com; FAX (301) 229-3148.

Do comment. But be civil. Don't abuse people who are simply doing their jobs. We have to get across that casting covetous eyes on amateur bands is counterproductive, and contrary to the public

interest. To accomplish this we need a lot of comments, including yours. But remember that the objective is to educate and persuade, not to intimidate. We don't need to. The facts are on our side.

To monitor the FCC's ongoing WRC-97 preparations, visit its WRC-97 home page at: <http://www.fcc.gov/ib/wrc97/>.

Write now. Right now! — David Sumner, K1ZZ



Elmer's Corner

By Paul E. Wilkins,
AB4CY

THE MAGIC OF THE OP-AMP

The Operational Amplifier, or Op-Amp, was a development of the latter part of WW2 when everything was still all tubes. Today they come on a chip and have a lot of advantages over the tube varieties. They show up in a multitude of places but only as a little symbol on a schematic. The Op-Amp is a DC amplifier with a gain of thousands to millions but is always used with negative feedback to keep it under control. An ordinary transistor amplifier stage has a nominal gain of less than a hundred.

The OP-Amp has two inputs and is designed to keep these two inputs at the same potential by feeding back a part of the output signal to one input terminal to offset the voltage at the opposite input terminal. If the feedback voltage is determined by a resistive voltage divider, the gain of the amplifier is completely set by the ratio of the two resistors. The amplifier itself becomes transparent.

Imagine, an amplifier whose gain depends only on the ratio of two resistors. And this gain factor (multiplier) depends entirely on the precision with which you set the resistors. The same circuit can be wired to divide an input voltage very accurately as well. You can connect multiple sources to the input terminal and they will not interact with each other as they would if they were just connected with parallel resistors to a common input. The circuit will add or subtract depending on the polarity of the inputs. So we can add, subtract, multiply or divide with an op-amp circuit.

If the feedback path in an Op-amp circuit is made reactive with a capacitor in the feedback network, the circuit performs an integration or a

differentiation of the input signal. Analog computers (as compared to the digital variety) are made of individual Op-amp circuits performing all of the mathematical operations. The real breakthrough came when it was discovered that if you put a P-N junction in the feedback network, the Op-amp would provide the logarithm of the input voltage over many orders of magnitude. This is what makes the handheld calculator so powerful. If you use a hand calculator, you use Op-amps.

Now, thirty years ago all engineers carried around "slipsticks" or slide-rules as they had for the previous fifty years. These mechanical devices were based on logarithms. To multiply two numbers you ADD the logarithm of each and take the antilog. To DIVIDE you subtract the two logarithms and to find the third power, you multiply the logarithm by three.

Now, all of a sudden we could do this electronically at lightning speed. I dare say that many of you have never even seen a slide rule outside of a museum. It's become a bit like a horse shoe. As an Engineering student in college, you either mastered the slide rule or took up Flytying.

Op-amps are used in audio filter applications because by shaping the feedback network you can create any bandpass shape you want and not use a single inductor. You can make constant output amplifiers that act like Automatic Gain Controls.

Because the amplifier has no capacitor coupling elements they respond exceptionally fast. It's not uncommon to see an Op-amp with an output speed of 10 volts per microsecond (that's ten million volts per second!). They make high speed comparators that will switch output polarity like a Schmit trigger without stability problems so they are used in a variety of control circuits.

FET input Op-amps have input resistances in the teraohm range and only require picoamps or less of driving current. Next time you punch up for a square root on your calculator, that's an Op-amp doing all the arithmetic.



DX DX DX

By John Kanode,
N4MM

DAYTON DX ACTIVITIES

There was plenty for the DXers at the Dayton Hamvention this year. The DX dinner, which was held at the Crowne Plaza Hotel was the first event. Although the general attendance at Dayton was off this year, the DX dinner attendance was about the same as last year. The main speaker was Wayne Mills, N7NG and he, along with Bill, KSFUV presented a program on their recent trip to Myanmar (Burma). The program was very interesting, well put together and did not run too long. The DXpedition of the year went to the XRØY group and Bob Schmieder, KK6EK, the DXpedition leader accepted the award. By pure chance, Bob and I shared the same table along with Jim, W6CF. Also at our table was K9KU; Stan, NØABA; Randy, K4EHT; Ron, K4QMU (who won the major and Bob, WA4AKT.

After the DX Dinner, the hospitality suites were open. There were about 8 of them this year in the Crowne Plaza. The biggest was THE TOP DAYTON DX SUITE which was on the top floor of the hotel. It was sponsored by DX Publications, DXWIN Software, XRØZ and XRØY DXpeditions and Northern California DX Foundation. If one wants to meet some of the top DXers, this is the place to do it. There was free wine tasting by Kenwood.

On Saturday, the main day for the Hamvention, the DX Forum started at 9:00 AM. The first presentation was Bill Kenamer, K5FUV, DXCC Manager and he presented info on the status of the DXCC Program. After him, Garth Hamilton, VE3HO gave the DX Advisory Committee

presentation. The three DXpedition presentations were the Wake Island DXpedition, the XRØY/Z Easter Island DXpedition and the XZ1A, Myanmar DXpedition. All three presentations were very well done. Although not on the program, Toly, UT3UY gave a brief talk on the 5A1A operations. 5A1A was approved for DXCC credit just a few day before the Hamvention and it was a hot topic at Dayton. Toly came to the Hamvention due to the good will of W4BRE, who covered Toly's expenses and travel to Dayton. Toly set up shop at the QRZ DX booth and was filling out QSL's for his part of the 5A1A operation. It was nice to get the QSL this way. There was a long line all morning waiting to get QSLs. On Saturday evening, the hospitality rooms were busy again with various activities. The Kansas City club was conducting some kind of a CW pileup contest. Bill Kenamer, KSFUV, with Don Search, W3AZD assisting, were checking QSL s for DXCC. They were busy every time I went by their table. I spoke with persons who were at the RSGB booth and they indicated to me that there is a good possibility that someone will be checking QSL's for the IOTA Program at Dayton in 1997.

There were several vendors selling various DX and Contest logging programs at the Hamvention. If you are interested in DX and contesting, there is plenty for you do and see at Dayton.

UPCOMING DX CONTESTS

RAC Canada Day Contest	July 1, 1996
IARU HF World Championship/WRTC 96	July 13-14, 1996
RSGB IOTA Contest	July 27-28, 1996

TIDBITS

During the IARU HF Championship and the WRTC contest in July, there will be 52 stations using 1x1 call signs from the sixth call area. It has been announced that QSL s from these stations will be sent through the US Incoming QSL Bureaus. This is an one time exception.

Continued on page 57



Traffic Fun

By Geri Sweeny,
N4GHI

SECTION MANAGER

Virginia has a new Section Manager - Chris Wright, KD4TZN, in Rocky Mt, VA. Our last manager, Ted, N4RS0, started a business. This, along with his teaching job, was consuming most of his time.

Thus, when Ted found out that Chris was willing (and had filed a petition), he arranged to transfer title. ARRL Headquarters had ruled Chris's petition to run was not valid because it arrived via fax. Chris is also the net manager of our 6 PM Virginia SideBand Net.

TRAFFIC USES

Last month I mentioned advantages for testers utilizing the National Traffic System (SPARK letting stations know that their VA QSO Party logs had been received). Immediate feedback is good. The NTS is also useful for QSL bureaus.

The following message was relayed to several stations in Florida:

"You have unclaimed QSL cards at the Fifth QSL Bureau x Please send two business size SASE to my callbook address 73".

QUIZ

1) What are the 4 parts of a message? 2) What was the check in the above message? 3) What does the check mean anyway? 4) What does the 'x' in the message mean? 5) Should you use capital, small, (or both) letters?

1) Preamble, name/address, text, signature. We can probably agree we need a to, from, and message. Why do we need the preamble?

2) 22 (If you put a telephone number in the text, how many words does it count?)

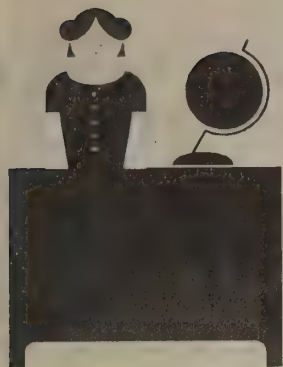
3) It's so that the receive station can decide if s/he got the entire message. We normally write 5 words to a line. Your math doesn't have to be great to quickly compare how many words you have versus how many words you should have. If this 'check' agrees, you can QSL the message. What if it does not agree?

4) We don't use punctuation in traffic handling - no commas, no periods, no apostrophes. The one exception is the slash (stroke); as in N4GHI/m (or even N4GHI/mm). If the message has a dash between numbers, you can throw in the slash. Mr. and Mrs. often becomes m/m. X (pronounced ex-ray), announces pauses between thoughts. Since the text should be short, the thoughts are often short phrases and not complete sentences. How many words can a text be?

5) Who cares. No one will ever see the message except you. You will either send it on; or, call on the phone and deliver it.

If you want to know more about traffic handling, call and/or send a message to N4GHI (703/360-3773) at WA3TAI. I can send you information by mail. In the meantime try listening to one of our (VA and/or MD/DC Section level nets) traffic nets.

VTN (VaTfcNet)	1:00 pm	3907
MEPN (MdEmerPhoneNet)	6:00 pm	3920
VSBN (VaSidebandNet)	6:00 pm	3947
VNE (VaNet - Early)	7:00 pm	3680 (CW)
M5N (Md Slow Net)	7:30 pm	3717 (CW)
VNL (VaNet - Late)	10:00 pm	3680 (CW)
MDD (MdDe)	10:00 pm	3943
VLN (Va Late Net)	10:15 pm	3947



"ADOPT-A-SCHOOL" Program

By Pat Kilroy, WD8LAQ
FAR Trustee

One of the most difficult steps in introducing a permanent presence of Amateur Radio in a school is obtaining a transceiver and its power supply. This problem goes away when you "Adopt-A-School."

The newly formed Foundation for Amateur Radio "Adopt-A-School" program is designed to encourage FAR-affiliated clubs to introduce and install HF Amateur Radio in participating local schools.

The FAR "Adopt-A-School" program matches schools with a transceiver and power supply. At the same time, the program matches each school with a sponsoring Amateur Radio club.

PURPOSE

The educational benefits of Amateur Radio are well documented. The purpose of the FAR "Adopt-A-School" program is to help clubs establish and maintain Amateur Radio on-the-air activities in local educational institutions, in a role supporting their existing science, technology or social studies curriculum or student extracurricular activities. So many facets of the hobby naturally embrace this strategy!

SCOPE

The school effort is expected to be largely parent supervised in close collaboration with the school administration and a volunteer amateur radio operator from the sponsoring club. The radio operating modes may be any within the Amateur Radio Service, but particular introductory emphasis is placed on the High Frequency bands and the excitement and privileges of the Novice Class license.

The age group target is mainly the junior high and senior high school levels. Scouts, Explorers and other community groups may participate too!

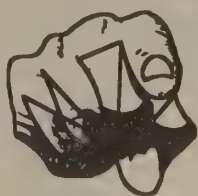
KEY ROLES

The Foundation is soliciting equipment loans and donations from the Amateur community for 100-Watt-class HF transceivers and respective power supplies in good working order. FAR evaluates each application written by the participating schools. FAR will attempt to match a participating school with a participating club and vice versa. The club and FAR monitor the equipment use and condition every six months. Loaned equipment is returned to its owner at the end of the period. The club supplies summer storage space as needed for the equipment. The responsibility of normal equipment maintenance, liability and repairs is negotiated with each club in advance.

LOGISTICS

The period of an equipment loan to a school will be either one-half school year or one school year, renewable by the standard application process. If school demand exceeds equipment supply then the selection process will be based on a combination of factors, including heavy weight on the school's written educational proposal (see elements below). "Adopt-A-School" will allow

Continued on page 29



FARfest Needs Your Help!



As you know, the annual **FARfest** is organized by the active trustees from member clubs. The actual event manpower is supplied by individuals and groups from various members of these clubs.

The physical work necessary to conduct the event begins on Friday and takes most of the day. Volunteer workers are provided with food and drink on the grounds. Saturday, more set-up continues and vendors begin to arrive, which requires controlled entry onto the grounds. Gate control, admission, tailgate sales and grounds clean-up are a few of the very busy Sunday tasks.

We are inviting additional clubs to become involved with the 1996 **FARfest**. If yours is one of the many faithful clubs who participate each year, we thank you, and ask you to take pride in assisting FAR with its only means of fund raising.

If you are not actively involved in the **FARfest**, please consider helping us this year.

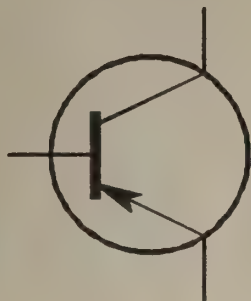
Specifically, we are in need of club groups who can volunteer for blocks of time at one of the TWO entrances.

This year, we are planning to recognize those clubs helping with ticket sales with a contribution to each club, commensurate with the person-hours and total attendance.

The gates are the most restrictive volunteer assignments, and two of the most responsible. Please consider offering a group from your club in 1996 for these or other tasks.

Please contact Al Brown, WA3FYZ (301-490-3188), or Tony Young, WA3YLO (301-262-1917) to make a commitment or for additional information. We are both listed on the first page of AUTO-CALL and are good in the call book.

Thanks and 73,
Tony and Al



Amateur Radio Training

John Forrest WZ4A
6111 Burnett St., Alexandria, VA 22310
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703) 644-3920
Anne Arundel RC	Tony Young WA3YLO	(301) 262-1917
Arlington ARC	Mike Callahan NW3V	(703) 251-5618
Antietam Radio Assn.	Robert Long KD3JK	(301) 824-5132
BRATS (Baltimore)	Joe Chidester W3SHZ	(410) 602-0353
Baltimore ARC	Essex Community College	(410) 780-6854
Fauquier ARC	Neil Spokes AB4YK	(540) 364-3861
Frederick ARC	Hal Silverman W3HWC	(301) 831-7946
Herndon Rep't Gp	Michael Weber WB8RDN	(703) 450-2304
Laurel ARC	Pud Reaver W3DQI	(301) 498-6293
Madras	Larry Ziecheck	(301) 984-6113
MD Mobileers ARC	Bruce Colburn AA3KR	(410) 437-1891
Montgomery ARC	Rocky Jones KC4UXO	(301) 216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703) 971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301) 249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703) 361-3091
Pentagon ARC	David Boyd K9MX	(540) 659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301) 862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(540) 722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301) 888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410) 586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(540) 659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703) 430-4149
Tri-County ARC	John Creel WB3GXW	(301) 572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703) 560-2779
Woodbridge Wireless	Jim Duffey WD4AIR	(703) 491-3170



Volunteer Examiner Cooperative

JOHN FORREST WZ4A
6111 Burnett St.
Alexandria, VA, 22310
(703) 971-3905

* Effective July 1, 1996, the Extra Class written exam question pool (Element 4B) will change. It is anticipated that the new question pool will be significantly different from the old pool. Be sure to use study materials appropriate for the current question pool.

* The maximum exam fee has been raised by the FCC to \$6.05.

* Copies of the complete (as of date) 1996 VEC Exam schedule from the *Auto Call* database are available. To obtain a copy, please send a large, self-addressed envelope with sufficient postage to cover 10 letter-size pages along with \$2.00 to cover copying costs to WZ4A at the above address.

1996 Schedule of Examinations

July 7 (Sunday)	Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
July 13 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In. Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions.
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In. Contact: Bob Israel WC3I (301)262-5083
July 20 (Saturday)	Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
July 27 (Saturday)	Fredericksburg, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC) Walk-In. Contact: Carolyn Cavanagh AC4SK (540)373-7076 or Jim McCloud N4LZJ (540)786-8012

July 28 (Sunday)	Hagerstown, MD - Antietam Radio Assn. (ARRL VEC) Pre-Registration Requested - Some Walk-Ins Accepted Contact: Al Boyers N3NVT (301)733-6522 Days Bob Long KD3JK (301)824-5132 Evenings Before 9PM
	Brunswick, MD (SweatFest 96) (ARRL VEC). Pre-registration desirable. Contact (301) 416-8447 box 110.

July 30 (Tuesday)	Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Jerry Gavin NU3D (410)761-1423
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August 4 (Sunday)	Berryville, VA - Shenandoah Valley ARC (Hamfest) (Mount. ARC VEC) Walk-Ins Welcome. Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
	Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day)(301)773-2898 (Evening)
	Elkins, WV (Mountain ARC VEC) Walk-In Contact: Walter Corley KF8SX (304)637-0506

August 10 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change. Call for directions.
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
	Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674

Don't forget to bring your license when upgrading!!

**August
15
(Thursday)**

Towson, MD - Baltimore ARC (ARRL VEC) Pre-Registration/Walk-In
Requirements Unknown Contact: HAM-TALK (410)426-8255

**August
17
(Saturday)**

Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable,
Limited Walk-In
Contact: John Creel WB3GXW
(301)572-5124 after 6 PM

**August
27
(Tuesday)**

Annapolis, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Limited Walk-In
Contact: Lois Turner KA3VVQ (410)647-4178

**September
1
(Sunday)**

Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In
Contact: Freddie Battle NG3G
202)546-9348 (Day) (301)773-2898 (Evening)

**September
14
(Saturday)**

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact:
Frank Mackey N4GUS (703)455-1510
Note: Temporary location change. Call for directions.

Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In
Contact: Bob Israel WC3I (301)262-5083

**September
21
(Saturday)**

Laurel, MD - Laurel ARC (Laurel VEC)
Pre-Registration Desirable, Limited Walk-In Contact: John Creel
WB3GXW (301)572-5124 after 6 PM

**September
24
(Tuesday)**

Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Limited Walk-In
Contact: Jerry Gavin NU3D (410)761-1423

- Remember to bring your license when upgrading! -

**September
27
(Friday)**

Stafford, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC)
Walk-In. Contact: Carolyn Cavanagh AC4SK (540)373-7076
Jim McCloud N4LZJ (540)786-8012

**October
6
(Sunday)**

Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In
Contact: Freddie Battle NG3G (202)546-9348 (Day)
(301)773-2898 (Evening)

**October
12
(Saturday)**

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In
Contact: Frank Mackey N4GUS (703)455-1510
Note: Temporary location change. Call for directions.

Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In
Contact: Bob Israel WC3I (301)262-5083

Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In
Contact: Leo Patterson KQ8E (304)289-3576,
Gay Rembold W3DFW (301)724-0674

**October
17
(Thursday)**

Towson, MD - Baltimore ARC (ARRL VEC)
Pre-Registration/Walk-In Requirements Unknown
Contact: HAM-TALK (410)426-8255

**October
19
(Saturday)**

**Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable,
Limited Walk-In**
Contact: John Creel WB3GXW (301)572-5124 after 6 PM

-TRAINING CLASSES -

NOVICE/TECHNICIAN COURSE: The Mount Vernon Amateur Radio Club will present an entry level amateur radio course to prepare students for the Novice and/or Technician class license exams. The course will include Morse code instruction. The course will meet in Alexandria, VA on one weekday evening per week starting in September. Dates, times, and location to be announced later. Contact John Forrest WZ4A at (703)971-3905 for more information and to sign up.



Volunteer Examiner Cooperative

EXAM FEES:

- * Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
- * ARRL VEC exams cost \$6.05
- * Laurel VEC exams are free
- * Mountain VEC exams are free
- * W5YI VEC exams cost \$6.05

BRING TO EXAM:

- * Picture identification
- * Completed FCC form 610 (most VE teams will supply at exam)
- * Original and a copy of current FCC amateur radio license
- * Originals and copies of all active certificates of successful completion of prior exams
- * Exam fee (check or cash depending on VE team)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

* If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team. It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., January 25 for March issue)



Antietam Radio Association presents the 1996 Edition of the **MARYLAND-DC QSO PARTY**

**August 10, 1996 1600z to 0400z August 11th &
1600z to 2359z August 11, 1996**

PHONE & CW: CW QSOs IN THE CW BANDS ONLY! Stations may be worked once per band using each mode. Only SINGLE OPERATOR STATIONS are permitted to enter from outside the Maryland-DC Area.

AWARDS: PLAQUES to the high scoring Single Operator MD-DC Station, the top Non-Maryland-DC Station and to the Maryland-DC Area Club with the high scoring entry ! (Columbia ARA defending club champ for last two years.) **CERTIFICATES** awarded for all other categories including **10 Best MD-DC logs**, best from each **U.S. State, Canadian Province, DX Country, MD-DC Mobile, Best YL Entry from Maryland-DC, High QRP Score from Each State and to the best Novice/Technician Entry from Each State!**

CERTIFICATES ARE ISSUED TO ALL WITH 50 OR MORE-QSO POINTS IN THEIR ENTRY !!!

THE RULES

1. Non-MD-DC Stations must work only MD-DC stations. MD-DC Stations may work anyone.
2. Portables and mobiles that change counties during the test count as a separate station in each new county of operation. Sorry, no packet or repeater QSOs allowed. QSOs part d a regularly scheduled net are not allowed.
3. EXCHANGE: QTH and MAJOR CATEGORY of entry. QTH is County for MD-DC Stations. Use U.S. State, Canadian Province or DX Country as appropriate for Non-MD-DC stations. MAJOR CATEGORIES are CLUB, QRP, MOBILE, NOVICE/TECH, and STANDARD. Stations should send the major category that reflects their HIGHEST POINT VALUE!
4. SUGGESTED FREQUENCIES: VOICE 3.92 7.23 14.26 21.37 28.38 50.15 MHz + SIMPLEX 2 METERS AND ABOVE. CW 3.643 3.701 7.035 7.126 14.04 21.115 28.04 28.115 MHz +VHF+UHF CW FREQS. CW IS ENCOURAGED AND SUGGESTED USE ON THE ODD HALF HOURS. Examples 1730 1930 2130 2330 0130 0330z
5. SCORING: For Non-MD-DC Stations - Each MD County + Baltimore City + DC are multipliers. (25 possible) For MD-DC Stations - the Basic 25 as above + each of the other 49 states + each Canada Province + each other DX country. (Rule change) Multipliers may be claimed once only. THEY DO NOT REPEAT ON EACH BAND.
6. QSO POINTS: 10 points for CLUB STATION QSOs 5 points for Mobile QSOs 4 points for QRP or NOVICE/TECH QSOs. 3 points for CW or RTTY QSOs (RTTY & CW count as same mode for scoring) 1 point for any other valid contact **HIGHEST SINGLE POINT VALUE APPLIES** Example - contact with a mobile club station is a 10 point QSO
7. Final Score: Add up the QSO Points and Multiply by the sum d the Multipliers.
8. Send logs with S.A.S.E. by September 10, 1996 to the ANTIETAM RADIO ASSOCIATION (W3CWC) P.O. Box 52 Hagerstown, MD 21741-0052.



FAR Meeting Minutes May 8, 1996 Alexandria, VA

FAR President, Chuck Sommer (N4OSD), called the meeting to order at 8:03pm at the Lee Center in Alexandria, Virginia.

The trustees introduced themselves. Those in attendance included:

Chuck Sommer, N4OSD,
PG Co RACES/ARES
Al Brown, WA3FYZ,
MEPN/Antietam Radio Association
Hugh Turnbull, W3ABC
FAR Scholarship Chairman
Hugh Katz, KB3TB
Voice of America Amateur Radio Club
Tony Young, WA3YLO
IBM ARC/Anne Arundel ARC
Ross Z. Merlin, WA2WDT
T-MARC/Mont Aux Comm Service
Page Pyne, WA3EOP
Antietam Radio Assoc/Opequon RS
Ed Mumford, N3IRO
CMARC/Frederick Amateur Radio Club
Mildred Mumford, N3KGQ
CMARC/Frederick Amateur Radio Club
Mary Morris, N3TCI
Mt Vernon Amateur Radio Club
Kim Stoffel, N3LTM
Hanover Area Hamming Association
Ralph Stoffel, N3KZS
Hanover Area Hamming Association
Rosie Falcon, N3IVO
Baltimore Amateur Radio Club

Pat Kilroy, WD8LAQ
AMSAT-NA
Jim Rose, N3FEW
Southern Maryland Amateur Radio Club
John Queen, KAØSEY
Auto-Call Editor
John Swafford, W4HU
QCWA Chap. 91/Dept of State ARC
Tim Dugan, KA3YYP
MD/DC MARS Association
Bill Stewart, KE4BAE
Explorer Post 80 (ARC)
Jeanne Rexrod, N4ZGI
Alexandria RC/Natl Cap ARES Council

The April meeting minutes were sent out only via e-mail. Copies were handed out, read and approved.

Treasurer Charles Johnson (N3HFO) underwent surgery on April 25th. A complicating infection resulted, and as a result, Charles is quarantined in the hospital. The Foundation offered their prayers and support to Charles and his family during his recovery. Tony Young (WA3YLO) visited Charles in the hospital and made the treasurer's report in lieu of Charles. The treasurer's report was accepted as read.

Auto Call - John Swafford (W4HU) reported that Auto-Call is in "good shape." Auto-Call had 1681 issues mailed out last month.

Continued next page

Millie and Ed Mumford (N3KGQ and N3IRO, respectively), who set up Auto-Call tables at area hamfests, reported that there were seven new subscriptions/renewals and one single copy sold at the Kent Island (MD) Hamfest and that 14 new subscriptions/renewals and ten single copies were sold at the Hagerstown Hamfest. Auto-Call editor John Queen begged for photographs to be submitted for use in future editions of Auto-Call.

Survivor's Assistance - Tony Young (WA3YLO) reported that he has been busy. He passed around a list of equipment he recently received. On the Virginia side, John Swafford (W4HU) had nothing to report.

Scholarship Committee - Hugh Turnbull (W3ABC) reported that the Delaware Valley Radio Association advised that they would not be able to fund the scholarship planned for this year. When the donor of the Nanicoke Amateur Radio Club became a silent key, his family was contacted to determine what changes, if any, might be desired regarding the award in 1997. To date, there have been over 300 requests for applications with 45 submitted thus far. The filing deadline is June 1. The Virginia Beach Hamfest Committee has invited Hugh to attend their annual banquet and present three certificates to the winners on September 27.

Continued on page 30

ADOPT-A-SCHOOL, from page 19

FAR clubs to have prime responsibility and visibility for the equipment and its servicing.

APPLICATIONS

A candidate school shall submit an "Adopt-A-School" application at least three months prior to anticipated station setup. Applications are available free with a self-addressed stamped envelope mailed to:

FAR "Adopt-A-School" Program
c/o Pat Kilroy, WD8LAQ
P.O. Box 1520
Bowie, Maryland 20717-1520

The sponsoring club completes some sections of the adopted school's application. Optionally, a school may attach an educational proposal to their application. The educational proposal may be very important in the school selection process. The proposal may include any number of elements, such as how the school plans to use the equipment and how often, how an Amateur Radio presence will compliment at least one school curriculum, the intended use of ARRL lesson plans and other resources available to the classroom, and a

description of the level of faculty, staff, administration, parental and community acceptance and support. Important too are how personal safety will be observed, how equipment security will be observed, and how student access will be maximized.

DONATIONS

We need you! If you or your club can loan or donate a transceiver and power supply to the program then please contact me (phone 301-249-3396 before 9 PM or e-mail wd8laq@amsat.org). Old equipment in good shape is gladly accepted. If you and your club can mentor a school then contact me too!

Please discuss this topic at your next club meeting. Spread the word of opportunity at your local school. You'll be pleasantly surprised how well some schools welcome your news!

Already, two schools asked to participate in our "Adopt-A-School" program. But we have no radio for them yet. Let's plan NOW to meet their needs for the new school year coming in September.

It's a worthy plan. Why don't you "Adopt-A-School" today!

ARRL Report — Hugh (W3ABC) reported that the ARRL is opening "Gate 1" for vanity call sign applications at the end of the month. Hugh also mentioned that a ham in Louisiana has had his license permanently revoked by the FCC. (See ARRL Bulletins for details.)

FARFest (Gaithersburg Hamfest) Report - The next FARFest Committee meeting will be at 7:30 pm on Wednesday May 22 at the PG County EOC just off of Eastern Avenue 1-1/4 miles inside the beltway.

OLD BUSINESS

Discussion continued on Pat Kilroy's (WD8LAQ) offer proposing that FAR sponsor an "Adopt-A-School" program to encourage clubs to introduce and install HF equipment in participating local schools. A letter was introduced from the Antietam Radio Association stating, in part, "the club [ARA] is supportive of the idea ... but [the proposal] does need to have some clarifications made as to responsibility and liability."

Discussion continued and modifications to the proposal were offered. A motion was made "That the Foundation ... support the "Foundation for Amateur Radio Adopt-A-School" program..." with modifications to FAR's role. The motion passed with 10 in favor, five against and four abstaining.

Jeanne Rexrod (N4GZI) reported on the ARES Institute held May 4th. The first cut at expenses came to \$413.84. Sixty-one people attended. The National Capital ARES Council is looking to hold additional similar seminars in the future.

NEW BUSINESS

A motion was made and passed to accept the Shenandoah Valley Amateur Radio Club trustee change. The new trustee is Stanley Monish, KD4HRJ. Stanley replaces Bettie Johnson who

became a silent key. Serving with Stanley as their FAR representative is Walter Johnson, WA4HVV.

A motion was made and passed to accept National Capital ARES Council into the Foundation with trustees Jeanne Rexroad (N4GZI) and Lenny Schachter (N3RPQ).

A motion was made to accept Lynn C. Wilson Explorer Post 80 into the Foundation. After some discussion about their name and clarification about their interest in amateur radio, the motion passed. Their name will appear in Auto-Call as "Lynn C. Wilson Explorer Post 80 (ARC)." Their trustees, Bill Stewart (KE4BAE) and Demetrios G. Pulas (AC4RH) were also approved.

ANNOUNCEMENTS

Page Pyne (WA3EOP) reported on the Hagerstown Hamfest, which was held May 5th. They had a good flow of people during the morning and made a modest profit.

Ralph Stoffel (N3KZS) announced the Hanover (PA) Hamfest on June 9th. (See Auto-Call for details).

The next Foundation for Amateur Radio (FAR) Trustees' meeting will be on June 12, 1996 at 8:00 pm at Columbia College in Takoma Park, MD. See Auto-Call magazine for directions.

Everyone was asked to stay a few minutes after the meeting for a demonstration of a digital camera by Kim and Ralph Stoffel.

A motion was entertained and passed to adjourn at 9:30pm.

Respectfully submitted,

E. Allen Brown
Executive Vice President FAR
Recording Secretary FAR

• • • ANNOUNCING • • •

CLEAR, CRISP, & STRONG REPEAT AUDIO!

C3I_® HAS RELEASED SEVERAL NEW PRODUCTS AND IS SETTING THE NEW STANDARD IN AUDIO PROCESSING TECHNOLOGY

- **OUR NEW C3I-100PG, WITH PATENT-PENDING AGC, WILL MAKE ALL YOUR USERS VERY PLEASED. ELIMINATE WEAK AUDIO, STOP "PICKED FENCING", BRING EVERYONE USING YOUR REPEATER UP TO FULL QUIETING WITHOUT RAISING YOUR NOSIE FLOOR OR HEARING THE PUMPING ACTION ASSOCIATED WITH ALL OTHER AGC CIRCUITS. THIS NEW PRODUCT IS OUR HOTTEST SELLER, 100s ARE NOW IN USE, CALL FOR FURTHER DETAILS. THIS IS AN AUDIO PROCESSOR AS WELL, SIMILAR TO OUR STANDARD PRODUCT, THE C3I-1000P.**
- **OUR NEW C3I-1000TT, IS A PANEL-MOUNT, 16 BUTTON MATRIX, SELECTABLE LOGIC, DTMF PAD, WITH FULL CONTROL OVER AUDIO LEVEL AND TIMING. WORKS PERFECTLY WITH THOSE CONTROLS THAT DEMAND PRESENCE OF COS BEFORE DECODING. NOW YOU WON'T HAVE TO USE A FAKE DTMF TO SIMULATE COS BEING PRESENT.**
- **ARE YOU TIRED OF LISTENING TO USER SQUELCH TAILS? GET RID OF THEM WITH OUR C3I-1000D, AUDIO DELAY MODULE.**
- **SOON-TO-BE-RELEASED: THE C3I-1000DVR, DIGITAL VOICE RECORDER; AND, OUR C3I-1000SQ, SIGNAL QUALITY VERIFIER. DETAILS WILL FOLLOW.**
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Owen Wormser, K6LEW

Sam Ruffin, KM4OI

The Shenandoah Valley Amateur Radio Club

Presents The

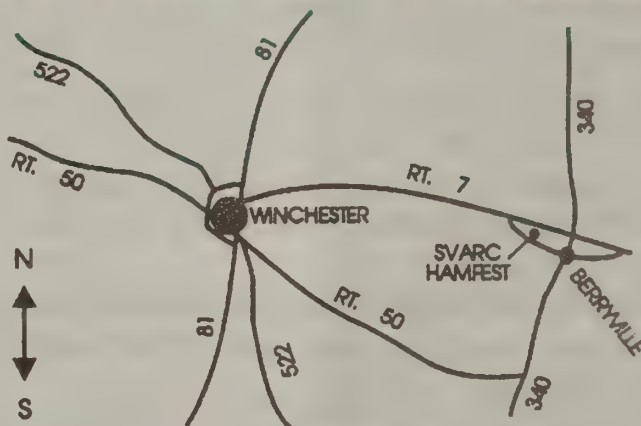
46th Annual Winchester Hamfest and Computer Show

(Electronics Flea Market Open To The General Public)

SUNDAY, AUGUST 4th, 1996

at the

CLARKE COUNTY RURITAN FAIRGROUNDS IN BERRYVILLE, VIRGINIA



ARRL APPROVED
HAMFEST

- GATE OPENS AT 6:00 AM
- GENERAL ADMISSION \$5.00 (children under 16 free)
- TAIL-GATERS ADDITIONAL \$7.00 PER SPACE
- COMMERCIAL & INDOOR TABLES BY RESERVATION
- COUNTRY HAM & EGG BREAKFAST
- CONCESSIONS & SNACK BAR AVAILABLE
- RURITAN'S FAMOUS CHICKEN & BEEF BARBECUE
- VE EXAMS (SAME DAY)*
- TALK-IN 146.22-82 & 52 SIMPLEX, W4RKC
- FREE BINGO WITH PRIZES
- GRAND PRIZES AND HOURLY DRAWINGS
- COUNTY PARK WITH POOL, PICNIC AREA,
AND PLAYGROUND OPPOSITE HAMFEST SITE

Remember!

Always the first
Sunday in August.

by Irvin Barb
KD4BHV
Hamfest Chairman

*VE Exams 8 AM by the
Mountain Amateur Radio Club
At Cooley School, across from
Hamfest - limited walkins
All classes of licenses
Pre-registration requested

For information and vendor registration and pre-reservations, call Irv Barb KD4BHV (540) 955-1745, Rt 3 Box 5385, Berryville, VA 22611
The SVARC is a non-profit, non-commercial special service organization dedicated to the furtherment of Amateur Radio communications



Alexandria Radio Club

Meetings: Second Friday of each month, 8:00 PM at the American Red Cross Bldg., 123 N. Alfred St., Alexandria, VA.

Club Station: W4HFH.

Repeaters: 147.315+, .444.600+ (Tone: 107.2)(Cross linked/2MTR), 53.13, 224.82 (Cross linked W/6MTRS), 919.6, 1282.6.

Nets: Every Thursday evening at 8:00 PM, 147.315/444.6.

Information: Harry Jones, N4CWP, (703) 790-9613, N4CWP@AOL.com.

One of the enjoyable parts of Ham Radio is the annual activities/camaraderie of Field day. The Alexandria Radio Club has held its Field day event at Fort Ward Park in Alexandria for the past 9-10 years. This year, as in recent years, we joined with the Arlington Amateur Radio Club to pool operating and work to make a successful weekend.

Since this is written before the fact, I am assuming that we have a great time and score an all time high. The bands opened up for 36 hours and every part of the world was open, even on 2 meters. If not, I'm sure we enjoy the weekend, food, and hamming.

Other activities are the opening of a new 2 meter repeater in Alexandria. This will be on the same frequency pair (147.315 out/147.915 in) but based on new equipment. Our thanks to Jim Schwitz, WA4CCF, who has provided repeater services for longer than I have been a ham. I recall working the repeater with solid copy when I was new and forgot to connect an antenna to my Heath 2036A. That was a great radio in great times.

Our next meeting will be 12 July 96, 8:00 PM at the Red Cross Chapter House, 123 N. Alfred Street, Alexandria, VA. We will rehash Field day and discuss upcoming foxhunts, etc.



AMSAT The Radio Amateur Satellite Corporation

Local Meetings: Semiannual in Spring and Fall.

VHF FM Net: Sundays at 9 p.m. on 146.835 MHz FM, WA3NAN/R, Greenbelt, MD except on government holiday weekends. Off during summer 1996.

Information: NCS Pat Kilroy, WD8LAQ,
Contact by e-mail: wd8laq@amsat.org .

AMSAT is a non-profit, scientific and educational organization incorporated in Washington, D.C. with headquarters in Silver Spring, Maryland. Everyone is welcome to join AMSAT and to become actively involved in the support and operation of the amateur space program. If you would like additional information then please check in to our local net. You may also write to AMSAT-NA at: AMSAT Headquarters, P.O. Box 27, Washington, D.C. 20044. Or you may telephone headquarters at 301-589-6062.

MAY ACTIVITY HIGHLY SUCCESSFUL

After a false start in March, this year's Spring semiannual local AMSAT meeting roared to success on the beautiful sunny afternoon of Sunday, May 5.

Our gathering that was originally scheduled for mid-March at the Intelsat building in D.C. was scrubbed due to an unexpected demand for a large fee. Tom Clark, W3IWI, then jumped in to co-host the meeting, suggesting we return to our roots at the GEWA Rec Center in Greenbelt, the place where all the AMSAT-NA Annual Meeting and Space Symposiums were held in the early years of AMSAT. It worked, and it worked well!

We out scooped the country with our keynote address. A team from the University of Maryland College Park, led by Ken McCaughey, N3FZX,

presented the results of the SPARTAN Packet Radio Experiment (SPRE) to their first of many Amateur Radio audiences. SPRE flew on the space shuttle in January. Presenting with Ken were Patty Bailey, Wayne Shanks and Jon Mitchell. Bob Bruninga, WB4APR, delighted the crowd with the mission results of APRtrak, an APRS derivative used to decode the SPRE downlinks.

Will Marchant, KC6ROL, and Frank Bauer, KA3HDO, followed with a presentation on the future of the Shuttle Amateur Radio Experiment (SAREX), with special insight to its evolution to the coming International Space Station. Will announced DC area opportunities in new hardware development.

Tom Clark, W3IWI, provided a high energy status briefing on a series of topics, including the Global Positioning System (GPS) and his Totally Accurate Clock (TAC), as well as the UNAMSAT, the unique Colibri ("Hummingbird") and the P3D GPS programs.

The social period was well used to network ideas, plan new activities and refresh friendships. Over thirty-three individuals attended. This number was much lower than our average, possibly due to the late notice of the new date. There were bulletins and pre-gathering discussions on the Internet AMSAT-DC mail list. So it pays to join the list. Remember, it's free with an e-mail request to Paul Williamson, KB5MU, at listserv@amsat.org!

WEEKLY NET: The weekly AMSAT-DC two-meter net may be silent through most of the summer but plans must be laid soon to give it new life in the Fall. If you think the AMSAT-DC net is valuable and can help out, we need you! A small amount of time can be turned into a visible and highly worthwhile contribution. Contact me soon; we'll talk! Until next time, play it safe around the shack, and have fun on the OSCAR birds!

73, Pat WD8LAQ
AMSAT Area Coordinator



Anne Arundel Radio Club

Meetings: 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.

On the air: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. Wednesdays at 2000 on 444.400. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 MHz.

Address: P.O. Box 308, Davidsonville, MD 21035.

Information: Margaret (Holly) Bevan, 410-923-0229.

At the May 16th program meeting, Richard (Mac) McNeeley/WN3C, coordinator of the Cycle Across Maryland Tour, gave a detailed presentation about the CAM, which is scheduled for July 21-27. He charted the course of the tour on a map which also indicated the planned stops, both rest stops and overnight stays. Several AARC members expressed an interest in joining the cyclists.

John Elliott/N3NCJ, Russ Slye/N3DDX and Phil Harich/N3UNF set up the speaker system for the third annual Annapolis Power Squadron and Safe Boating Festival on the Annapolis City Dock on Saturday May 18th. Hundreds of visitors toured more than a dozen exhibits and watched demonstrations of water safety. The festival included music by the Annapolis High School Band and the Naval Academy Band and a parade of boats.

On Sunday May 19th, a group of AARC members coordinated by William (Stan) Stanek/N3PPJ furnished communications and sometimes

transportation for the annual SPCA Walk for the Animals at Quiet Waters Park. As usual, the workers reported that they had fun watching the various animals as they covered the event.

At the clubhouse on May 11th Robert Israel/WC3I, Oscar Ramsey/NV3G and Charles Tiemeyer/W3RMD gave 26 tests to 17 persons. Sixteen tests were passed with 8 upgrades. Other members of the team were: Herb Elkin/KA3FDO, Harlan Ray III/AA3FE, Robert Kammer/N3POX, Bettye Tiemeyer/K3VRZ and Holly Bevan/N3BMB. The next testing session at the clubhouse will be on July 13th.

73, Holly/N3BMB



Antietam Radio Association

Meetings: First and Third Tuesday of the month at 8 p.m. in the Conference Room at the Washington County Regional Airport, Showalter Road, Hagerstown, Maryland.

Mailing Address: P.O. Box 52, Hagerstown, MD. 21741

Nets: Tuesday 7 p.m. 146.940 MHz.; Wednesday 7 p.m. 447.975 MHz.; Thursday 7 p.m. 147.090 MHz.

Repeaters: 147.09+ and 146.94 -.

Information: Donnie Sue Mulligan/
KB3AOO (301) 582-2984

Our fourth GREAT HAGERSTOWN HAMFEST and COMPUTER SHOW was held on May 5, 1996 and was a good one. We saw some old friends and met some new friends...hams and non-hams.

It was our pleasure to have Hugh Turnbull/W3ABC (the Vice President of ARRL), Kay Craigie/WT3P (the Atlantic Division director), John Kanode/N4MM, and Al Brown/WA3FYZ at OUR HAMFEST! And, Ed and Mildred Mumford were at the Foundation for Amateur Radio (FAR)

table. It was nice to see them and to sign up for another year of AUTO-CALL. THANKS to all!!

We want to say THANK YOU to all the hams and non-hams that worked to set-up on Saturday morning and helped with the hamfest on Sunday...Bill/N8UKC, Jo Ann/N3VWO, Tina/KB8ZQM, Don/KB8WHW, John/N3TDN, Page/WA3EOP, Sue Smith, Gene/N3MZB, Gary/N3VDU, Amanda/N3TVD, Linda/N3VZY, Ray/N30DA and son Luke and Ray's wife Marion Mongrain, Roger/KB3ADU, Al/N3NVT, Ray/KB8YJX and son Fred Elliott, Bob/KD3JK, Carlo/K3ABH, Ted/ WA3AAT, Larry/N3QBK, Jim/KD30, Bob/X5ME, Charlie/N3MVR, Greg/N3ULB, Jeff/N3PMN, Jim/N3PMP, Jack/N3NHR, Irvin/N3VOE, Joe/ WA3BUI, Jamey/N300E, Steve/N4TMS, Don/N3VGP, Greg/N3NRI, and Donnie/KB3AOO. Sorry if I missed anyone.

There were almost 50 prizes given away at the hamfest some subscriptions to magazines antennas, etc. Congratulations to the BIG WINNERS of the six main prizes; Bruce Mitchell/ N3TDL, Raul Fuentes/N3UNG, Norm Burrier/K3VHY, Bill Harrison/ W5VSP, Steve Sherman and Bud Jarrett/ KD3J.

Kathy Sazoni/N3SAD, of S & S Engineering, came to our meeting on May 7th and gave a presentation about kit building. The members were impressed with her knowledge of kit building, her soldering, and we had a good look at some of the kits S & S offers. Thanks, Kathy.

WQ now have a General Class at the E.O.C., Washington County courthouse in Hagerstown with some very intelligent Morse code and theory instructors. The class started on May 11th through June 15th. I'm trying my luck at this class.

June 22nd and 23rd is Field Day. Amanda Daywalt/N3TVD is the one getting it together, and I must say, she's really into Field Day and doing it very well! Tell you more about it next time.

Enjoy Independence Day...
73, Donnie Sue/KB3AOO



Capital City Amateur Radio Society

Meetings: 3rd Saturday of each month at 1200 hours at the Woodridge Public Library, 18th and Rhode Island Ave, N.E., Washington, D.C. Visitors welcome.

Repeater: W3EIL 144.51/145.11 MHz, open.

Nets: Regular net Wednesday at 2000 hrs, RTTY net Thursdays 2100 hrs, voice portion 2145 hrs, all on 145.110.

Mailing Address: CCARS, 1719 Franklin Street, N.E. Washington, DC 20018-2033.

Information: Steve, W3ETX, (202) 526-1329 or Chester, W3EIL (202) 529-9598.

Congratulations to our newly elected Club Officers. They are as follows: President, John Leake, N3TCD; Vice President, Cyrus Parker, N3EPH; Secretary, Chester Martin, W3EIL; Treasurer, Willis Stewart, N3LGB. Board of Directors: Weaver Shepperson, WB3KIC; Ernest Stephens, W3ETX; Gustavo Hernandez, KE3NY. Many thanks to Jackson Davis, KB3KI for presiding over another smooth election and installation.

The meeting ended in a festive mood, Roberta and Lydon Swartzendruber, N3RRD - N3RHF really went "all out" in preparation for our collation. Steve, W3ETX entertained the members with video of the CCARS Annual Birthday Party held at Fort McNair last Valentine's Day.

Under the leadership of our new President, N3TCD and your continued solid support The Capital City Amateur Radio Society is assured of another very successful year. See you at our first meeting in the fall - September 21, 1996.

**SUPPORT YOUR FAVORITE REPEATER
and RADIO CLUB!**

73, Steve - W3ETX



Carroll County Amateur Radio Emergency Team & Radio Club

Address: Carroll County Amateur Radio Club
P.O. Box 2099, Westminster, MD 21158.

Repeaters: 2M: 145.410-, 70cm: 449.875,
6M: 53.090.

BBS: 145.03 & 446.075.

Nets: Tuesdays 8:30 p.m. local CARET Net
145.410-. First Wednesday: 8:00 p.m. local,
Mason Dixon Swap Net 145.410-.

Club Meetings: Business meeting Second
Monday of the month at the EOC in
Westminster. 7:30 p.m. local, talk-in: 145.410-
Program meeting: Last Wednesday of the
month at the EOC in Westminster. 7:30 p.m.
local, talk-in: 145.410-.

Greetings from Carroll County MD. This year started with the club paying part of the cost for receiver kits for those people who helped with last years hamfest. Most of the kits have been received and building sessions will continue after the regular business meetings on Monday nights. In April the ARES/RACES group provided communications for two walk-a-thons, The MS-Walk was supported by 10 hams, 9 members: N3SLO/Jeff- Event Liaison, MS Coordinator, and ALT-NCS, N3TOT, N3JIA, N3UHC, N3UUW, N3RKI, N3MYJ, KG6TU, N3KTX, and KE3FL. The March of Dimes Walk on Sunday April 28TH was supported by 7 members: WX3F, N3GQK, N3TOT, N3UVH, N3PPO, N3KTX, and NS3X.

Three of our ARES members attended the National Capitol Area Council of Amateur Radio Emergency Services' "National Capital Area Council A.R.E.S. Institute" training which was held on Saturday May 4th, they were: N3JIA, KG6TU, and KE3FL.

Preparations are now under way to support CAM (Cycle Across Maryland), July 22 through 27, the "Country Fest 1996" a country music

festival in Westminster on July 7th, and for Field Day '96 which will be held at the Gamber VFD fair grounds.

Jerry, N3SOK and Joe, AA3EU have been working on an amendment to the Carroll County Zoning Ordinance concerning HAM radio towers. SKYWARN: The Carroll County Repeater 145.410- is now in the service of the NWS during weather emergencies. We have Charlie, N3REI to thank for organizing and coordinating our skywarn efforts!

73 de KE3FL, Phil



Central Maryland Amateur Radio Club

Meetings: 4th Friday of the month at 7:30pm, at the Doctors Community Hospital, 8118 Good Luck Road, Lanham, MD (no meeting in December). Enter in the Outpatient Testing entrance across from the Emergency Room entrance behind the main building. Take the elevator to the 5th floor and exit left, the meeting room (DSE Room) is on the right.

Repeater: N3EZD/R 145.230 MHz.

Net: Every Tuesday, 9:30pm, 145.230 MHz repeater.

Mailing Address: Central Maryland Amateur Radio Club, P.O. Box 788, Greenbelt, MD 20768-0788.

Information: Oscar Ramsey, Pres - NV3G, (301) 262-3392.

CMARC's regular April meeting was held April 26th at Doctors Community Hospital. Jerry Herman/N3BDW, net manager of the Hurricane Watch Net, was guest speaker. Jerry captivated his audience, giving a brief introduction to hurricanes, and how the Hurricane Watch Net has help save lives and feed information to the National Weather Service since its inception in 1965. For more information on the Hurricane Watch Net see the comprehensive article in the May 1996 QST Magazine.

CMARC's regular May meeting, held May 24th at Doctors Community Hospital, featured a detailed history and description of the new N3EZD repeater controller by (who else?) Mike/N3EZD. New features currently in use are voice identification, announcements of club activities, voice time announcements, and a manual autopatch. Mike described several other features that can be activated, and gave a brief demonstration of the controller.

CMARC was well represented in community service activities the past couple of months. Several CMARC club member participated in Prince George's County Christmas in April activities on April 27, either as communicators or as house rehabilitators.

Four CMARC members took the National Capital Area Council Amateur Radio Emergency Services Institute on May 4th in Falls Church, VA. Leah/N3RLN, Lydon/N3RFH, Jim/KD3JA and Tom/N3BXW are now card carrying members of ARES. Finally, several CMARC members participated as communicators or walkers in the Church World Service Crop Walk on May 19th in the Hyattsville, MD area.

Looking towards the future, CMARC plans to participate in Field Day, the BRATS Hamfest, and the Greenbelt Labor Day Festival.

73 de Jim/KD3JA

Chapter X

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of Wireless Pioneers

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OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703) 536-9537



Columbia Amateur Radio Association

Club meeting: 4th Tuesday of the month at 7:30 p.m., at the Bethany United Methodist Church, Bethany Lane, Ellicott City.

Net: 147.135 repeater at 8:30 p.m. each Tuesday except for meeting nights.

Youth net: 147.135 repeater at 7:30 p.m. every Thursday.

Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.

Information: Larry Russo, Pres - R3TFU, (301)725-2840.

Mailing: P.O. Box 911, Columbia, MD 21044

Plans are being finalized as F-Day draws near. Our May meeting continued these preparations with an in depth discussion of plans and assigned duties. The plan is to have VHF/UHF, packet, and Novice/Tech positions. A final work party was held at Alan's-N3AC house on May 25th.

Plans are also underway for the Maryland-DC QSO party on 11 and 12 August. More on that next time.

Until later, 73's, Jean Williams, KB3AOT

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Fauquier Amateur Radio Association

Meeting: 7:30 p.m., 2nd Tuesday of the month except July, August and December. Shadow Lawn Recreation Center, Warrenton VA.

Breakfast: Last Saturday of the month at Western Sizzlin Warrenton VA 7:30 - 9:00 a.m.

Net: Every Wednesday, 9:00 p.m., 147.165 Mhz NZ4N Repeater.

Packet: KE4YVU FARA7 node 145.070 Mhz with direct connect to FBBS9

FBBS9 Bulletin Board 145.090 Mhz,

FARA9 node 145.090 Mhz.

Repeater: NZ4N/R 147.165 Mhz (+.600 Mhz)

Newsletter: TOROID, Monthly. Deadline for submissions: 20th of the month.

Information: Don, WY2V, (540)347-5745 or Larry, K4LLQ (540)347-7609. FARA, PO Box 752, Warrenton VA 22186.

Next meeting: Sep 10.

The May club meeting featured Frank, W4NHJ reviewing plans for Field Day. Things were a little hampered by the small turnout, but we managed to volunteer all the needed equipment...whether the owners were present to defend themselves or not! Field Day should be great this year! Look for KE4YVU in the contest.

The June meeting will be the last club meeting until September. We take July off to recover from Field Day and August because of vacations. Club breakfasts on the last Saturday of the month will continue, and so will the Wednesday night net.

The TOROID published as a joint May-June issue the last time around. Woody is always looking for good articles and "For Sale" ads, so gives us a call if you have something for the newsletter.

The club will (did) host a table at the Manassas swap. It's always nice to make more room in the

basement for all the goodies you pick up at the next swap! This one helps the club coffers too. The ARES and club members will be supporting the Therapeutic Ride-a-thon in August. Call the ARES coordinator, Don WY2V if you can help out.

That's all for this month:

73, Mark, KD6AKC



Green Mountain Repeater Association

Meetings: Board of Directors, Last Monday of each month.

Repeaters: KD3VR-146.61 (Cheverly), K3GXF-146.88 (Greenbelt).

Luncheon: First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, US Route 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM. Monitor 146.88 for Talk-In.

Nets: Old Gents Net meets on 146.88 each day at 9:30 A.M. and 6:30 P.M. Washington Adventist Amateur Radio Association Net meets on 146.88 each Thursday at 9:30 P.M.

Mail: P.O. Box 523, Bowie, MD 20718-0523.

Information: John Williams, N5SJZ, (301) 805-5761.

There was another fine turnout for the monthly GMRA luncheon held at the Laurel Center Shopping Mall on Saturday, May 4, 1996. There was approximately three dozen in attendance,

The new antenna for the 146.88 repeater was installed on March 31, 1996 by volunteers and GMRA members assisting. Many thanks to Jake, AB3A and Jake K07V who climbed the WSSC water tank and installed and secured the new antenna and connected it to the feed line. Thanks also to Joe, KD3VR and all those that assisted in the assembly and hoisting it up to the top.

GMRA has purchased two newer repeater units

for the 146.88 and the 146.61 repeater sites. John, N5SJZ and Joe, KD3VR discovered the units for sale at the Timonium Hamfest in March. Both units are solid state Motorola Micors with 100 watts continuous duty. The 146.88 site will be installed first as soon as convenient and a new antenna will be installed along with the other repeater shortly after at the 146.61 site.

Hope to see a large turnout for the June lunch gathering. Please come.

73s from Ken Easton, N3HLY



Hanover Area Hamming Association

Meetings: Second Tuesday of the month, 8:00 pm, at the meeting hall of the Alesia-Free Methodist church.

Mail: P.O. Box 381, Manchester, MD 21102

Repeaters: 2 mtrs: 146.895-, 440: 447.675-6 mtrs: 53.19-.

Club Callsign: KB3BLS

BBS: KB3BLS 145.07

Voicemail: 410-239-8451

Repeater enhancements and construction has swung into hi-gear with the coming of warm weather. Our tower crew Mike, N3KTX, Ron, N3VTR, Terry, N3XBO, and Ralph, N3KZS completed the installation of antennas and feedline for the fifth remote-receive site (Gettysburg) for the 146.895- repeater system.

With this accomplished, then Ralph, N3KZS began the process of converting a commercial GE Master Exec II VHF receiver and UHF transmitter into the remote receiver and transmitter for the site. Also, the UHF Master Exec II link receiver was tuned up and installed at the main site. A Doug Hall 4RV/2 slave voter card was installed into the voter rack and the additional receiver was interfaced to the voter.

Oscar Gateway

Several times this month Ralph, N3KZS activated the OSCAR gateway remote base on the repeater system, operating on AO-10 satellite, which has had a very strong down-link signal all month. In case you are not familiar with satellite gateways, here is an explanation: the satellite gateway allows a repeater user with as little as a 2 meter handheld to work DX stations via satellite through the repeater system. The repeater system is interfaced with a full-fledged OSCAR station with computer controlled tracking antennas and a computer tuned radio.

Future plans for system enhancement include interfacing gateway control to the ACC RC 850 repeater controller, so users will be able to activate gateway operation by touch tone.

Six Meters

If you are looking for some good FM six meter DX, try 53.19- repeater. Over the last few weeks there have been numerous band openings bringing users from Louisiana, Texas, Oklahoma, Kentucky, and Florida.

Faxback

If you would like to receive a complimentary newsletter, you can retrieve our last issue through the club's voicemail (410-239-8451). Call it and let us know what you think!

Until next month... 73, Kim N3LTM

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The Herndon Repeater Group

On-the-air meeting: Mondays at 9:00 pm on the Herndon repeater.

Repeater: N4FSC, 145.310 (Herndon)

Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070-1964.

Information: Mike N4FXP, (703) 406-3158.

The Herndon Repeater Group (HRG) is a family-oriented ham radio club affiliated with the N4FSC repeater in Herndon, VA. Membership is open to all, and the club holds several social and operating events each year. Dues are \$20/yr for your entire family; members have access to the repeater's autopatch. All area hams are warmly invited to join our information net on Monday evenings at 9:00 PM.

Plans are proceeding for Field Day. We're all looking forward to another fun Field Day weekend at Lake Fairfax Park. Come to visit, or to operate one of our QRP phone or CW stations for a while. Everyone is welcome.

HRG doesn't have regular club meetings; our weekly net serves that purpose. We meet on the HRG repeater each Monday night at 9 PM to share information about club activities, the repeater, and our own ham activities. Many folks drop in to mention ham-related items they have for sale. Usually a different HRG member conducts the net each Monday. It's a directed net, and we try to use good net discipline just to keep in practice.

Right now, the club is looking for a net manager, someone to organize the net, and to arrange for net control stations each week. It's an important and interesting job, and we hope some local ham will rise to the challenge. If you're interested, contact our club president Mike, N4FXP at (703) 406-3158.

73 de Mike, N4PDY



Historical Electronics Museum Amateur Radio Club

Meetings: Third Wednesday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and Elkridge Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

Net: Monday 8:00 PM, 146.67(-)/224.24(-) MHz (courtesy of BARC).

Information: Gary Ryan, (410) 969-0410.

Mail: P.O. Box 746, Mail Stop 4015, Baltimore, MD 21203.

Street address: 1745 W. Nursery Rd., Linthicum, MD 21090.

The TBL-13 project continues to make progress: Suppression Grid Modulator- Charlie Angel, AA3FB has completed the restoration and all smoke and functional testing was completed. It is now to be permanently wired into the TBL-13.

Shunt Regulator - Heru Wamsley, W3WVV has made initial tests and determined that he will have to procure a matched pair of working tubes to achieve good regulation. Ernie Farkas has rerouted the antenna cables to a more permanent and trouble free configuration.

The material for the new station operating positions have been procured and Dean Bush, K3KHG is beginning the assembly. This will provide 12 linear feet of operating space.

The first HEMARC field day is chaired by Lois Turner, WA3VVQ. The operation will be on the lawn of the Museum and will include battery operated QRP stations on 20SSB and 40CW. The club ATV station will be operated inside the Museum as a public demonstration.

Rol Anders, K3RA is encouraged by the progress of the Upgrade to General students group and 7 to 9 are expected to be ready for end of May testing.

Heru Wamsley, W3WVV reported that the HEMARC ATV system is participating in an informal 70CM net on Monday is at 10:30 AM.

HEMARC hopes to encourage AMSAT to include 70 CM fast scan ATV in the planning for hamming on the new International Space Station.

The highlight of the meeting was a presentation on ARES, RACES and NTS and how they all work to provide emergency communications to communities in emergencies. The presenters were Al Nollmeyer, W3VYQ and Mike Carr, WA1QAA. Al is the Assistant Section Manager for RACES Coordination and Mike is the Section Emergency Coordinator. They provided a very clear view of how and why the emergency amateur radio participation is organized for training and action in a crisis situation. They also explained how individual hams can participate. A little history of the ARRL is role in all this also proved very interesting. HEMARC is very appreciative of Al and Mike for this well thought out presentation of an important part of amateur radio.

PRE-WW2 DXCC QSL CARDS STILL NEEDED

HEMARC is trying to set up a display of at least 100 pre WW2 DXCC QSL cards. All cards loaned will be protected and returned to the owner after display. Contact Rol Anders, K3RA at 410-796-4792 if you have any of these cards.

73, de Chip, W4PBG



Reminder - all submissions for

AUTO CALL

are due no later than
the 1st of the month prior to the
month of publication!!



Laurel Amateur Radio Club

A Volunteer Examiner
Coordinator

Meetings: 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel Md.

Social: 2nd Wednesday of each month, except December (Call for directions).

Nets: 1st & 3rd & 5th Wednesdays, 8:30pm, on 147.225+, no tone.

Mail: P. O. Box 3039, Laurel, MD 20709-0039

Exams: 3rd Saturday of each month, to pre-register contact: John/WB3GXW (301) 572-5124 after 6 P.M.

Information: Jim/WI3N (301)725-6829 or Pud/W3DQI (301)498-6293.

FIELD DAY !!

The Laurel Amateur Radio Club will operate as a "2A" Field Day station this year using either the club call sign, KB3BLK, or if Mary Ellen/AA3KW receives her father's call sign (a W3 one-by-two) via Gate 1 of the Vanity call sign process, we will be using it. At any rate, the Field Day set up will be at Supplee Lane Park on Brooklyn Bridge Road. If you can, come by and see the beam antenna hoisted up in the "cherry-picker". Whatever works!!

June started off with the club providing communications support for the Laurel (Pallotti) 5K Run/Walk on June 8th. Mark/N3NTQ coordinated the club's participation in this first annual event!

Jim/WI3N and Pud/W3DQI have begun trying to make a satellite contact with Bill/KI7AO in Washington state, using the RS-12 satellite. In late May, the first attempt worked fairly well with both ends communicating...but neither knowing if the other heard the transmission of the other. Nevertheless, the satellite bug has bitten them...and there's no stopping now.

On a personal note...I'll be away on an extended bicycle tour for six weeks this summer and Pud/W3DQI will fill this space with the club news while I'm gone. I'm taking the HT with me and hope to make a few contacts as I bicycle-mobile. — Which reminds me...that I recently met a ham on the Newark, OH, 2m repeater, when I was traveling in the area and had a tire "blow" on my car. I called on the repeater for help in finding a tire store to get a new tire and Bob/K8LJ came back and directed me right to the parking lot of a tire store that was able to replace my tire. Amateur Radio comes through AGAIN!!

Have a great summer hamming !!

73 de Roger/N3MIJ



The Maryland Apple Dumpling Radio Amateur Society, Inc.

Meetings: 2nd and 4th Thursdays - 7:00 P.M.
NBC Building - WKYS Conference Room,
4001 Nebraska Avenue, Washington, DC.

Nets: 1st and 3rd Thursdays at 9:00 P.M. on
145.45 MHz (PL-5A).

Repeaters: 444.100/449.100 MHz (PL-2A),
145.45/144.85 MHz (PL-5A).

WWW Address: <http://mvhsl.mbhs.edu/~fwright/MADRAS.html>

Mailing: P. O. Box 2468, Wheaton, MD 20902

Information: Larry Ziecheck - N3GKZ (301) 984-6113, Jean Blacik N3PLC (301) 984-6113.

It is always a special treat to have Kay Cragie WT3P, as a guest speaker at one of our club meetings. On May 9th, Kay spoke to our group on "The Future of Ham Radio and the ARRL". Kay, as you know, is now the Director of the Atlantic Division for ARRL. We are very fortunate to have Kay at the helm of our division. She has been a ham for many years and is still as enthusiastic now as she was when she received her license - maybe even more so.

During Kay's presentation we discovered that ARRL has a Web Site and their Web Master is Dave Newkirk WJIZ. You can contact him at Webmaster ARRL.Org.

We were delighted that Hugh Turnbull W3ABC, dropped in to give us his support during Kay's visit and added a few interesting little tidbits during the evening. Of course we bombarded them with questions on the vanity calls, exchanging club calls, etc. Kay did encourage us to keep after our members to upgrade their tickets to as high a level as they think they can accomplish. We believe Morris code is here to stay in the ham community so all of us non-code techs had better get busy studying if we eventually want to get that Extra ticket.

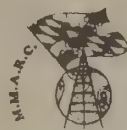
Scott Standiford W3YTW, gave the "Field Day '96" presentation at our May 23rd meeting. He outlined the work that had been done so far on field day scheduling and activities, and then laid out what was left to accomplish. The month before Field Day is always the busiest and this year is no exception.

Once again, Michele Cimbala W3YTW, has agreed to volunteer her wonderful air-conditioned home and spacious back yard for our annual MADRAS Picnic and Barbecue, which will take place on Sunday, July 21st. Our menu will feature juicy burgers and hot dogs along with salads, cole slaw, beans, fruit platters, watermelon, cake, cookies and sodas. This is always a fun get-together for our members and we know a good time will be had by all.

Congratulations to the youngest member of our club, Frank Wright N30Q who has just been accepted into Harvard. We are all very proud of you Frank, and will be keeping an eye on your academic progress during the coming year.

Have a safe and fun-filled Fourth of July.

73's, Jean



The Maryland Mobileers Amateur Radio Club

Meetings: First Friday of each month at the AA Co. EOC, Crownsville State Hospital grounds Crownsville, Md.

Repeaters: WA3PJQ - 146.805 & 449.125 both in Millersville, Md. W3VPR - 442.3 in Annapolis - Joint usage AARC.

Social Breakfasts: 15 days (3 Saturdays) after club mtg, at Rick's Cafe in Odenton at 9 AM.

Mailing: MMARC, P.O. Box 935, Severn, Md. 21144

Nets: 2-Meter on 146.805 @20:30 local time every Monday, 10-Meter CW practice net @19:00 Monday on 28.230 MHz.

Information: H. John Kohl, KO4A, (President) 410-757-8148. Bill Ziegler KA6TYY (410) 987-2384.

Greetings to all from the Mobileers!

Bruce, AA3KR, started the May meeting with an informative video on cellular telephone and the new Personal Communications Service (PCS) system. If you think ham radio equipment and technology is changing fast, you should see how things are changing in the commercial telecommunication world.

The club president proposed spending more money on the 146.805 2 mtr club repeater to get it back performing in Top Notch condition. The club supported this and in the near future time, money and sweat will be combined to upgrade the quality of the MMARC 2 mtr repeater. If you use the repeater on the fringe areas and notice an improvement or degradation, please let me or John/ KO4A know about it.

John, N3BTM, was the chairman for TORSK OPS 96. For those who do not know, the Mobileers conduct a special event station each year on Armed Forces Day aboard the sub docked in front of the

aquarium in Baltimore's inner harbor. The following is John's report on how things went.

" May 18th, Armed Forces Day, and the Torsk operation went off, with a few minor visits from our friend Mr. Murphy. The old gentleman is no stranger to those who regularly operate remote.

" We started off in Mobileer style with breakfast at the Honeybee. Afterwards our caravan got underway in the murky mist and fog that had me wondering just how slippery the climb would be to the top of the sail. But upon arrival I was pleased to see that the old sub's metal surface was pretty dry, which made me feel a lot more comfortable up top.

" For the antennas we used two dipoles for HF, and a J-pole for two meters. The 20m ran toward the bow while the 40m sloped to the stern. The clamps I brought for the J-pole were too small for the mast I wanted to put it on. But that's nothing a little duct tape can't fix! (When in doubt, use it.) When finished, I must say, the sub looked good with the wire antennas running along it's length, in a sloper formation.

" Ah I thought, with the antennas up smoothly the rest will be a breeze. But Mr. Murphy is never so foolish to attack the area of concentration!! All we needed to do now was to move the equipment below, set up, test the SWR's and let her rip. For that you usually need to find the other end of the coax.

" Well it was there a couple of weeks ago in the radio room where we left it last year. But as we discovered, during the last two weeks some workmen had pulled the coax back through the conning tower. After locating, untangling, and re-routing the coax, now we were ready to operate.

" Wrong, those same workmen, busy little bees that they are, had added some things to the electrical circuit. And when we began to transmit, we blew a breaker. It got dark in the radio room. REAL DARK. Fortunately the rest of the ship is

equipped with emergency lighting. The problem was solved by using two separate circuits and turning off a few lights.

" So after fending off Murphy's attack things settled down to some fun on the bands. The 40m station worked the hardest, racking up about 175 contacts. Total contacts were 275. The 20m station seemed to be working fine. And the band seemed to be in good shape. But there just weren't many stations on the air.

" Although we did work the USS Lexington in Corpus Christi. Which, as it turns out, was our only ship to ship contact. We also worked KA3OMU & K3ZHD from the Dayton Hamfest. In fact we seemed to have a pipe line into Dayton. We even worked a QRP station!

" So over all I think a good time was had by all. For those of you who have not made the Torsk one of your club activities in the past make try to make it next year. Thanks to all those who helped by making their equipment available, and of course to the hard working crew for '96: KO4A; WN3C; WB3DAO; N3MDB; N3OPI; N3UTA; N3WRC."

Please note our club meeting, breakfast and net times. We would be happy to meet you and share some good " Ham Stories"!! Don't hesitate to use our repeater if you are in our area.

73, Bill, KA6TYY



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On-the-air: Sundays and Wed. 8:00 P.M.

Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, Va., 22041.

Information: Sam - N3GHY (301 430-3373)

Jim - KA4CKI (703 494-342)

Tom - KO40X (540-752-2100)

Rich - KA3BTD (301-843-1253)

Our club nets on Wednesday and Sunday have been going strong. Some happenings within the club is as follows. Some new tubes for the 900 MHz RF amplifier were purchased by Jim - KA4CKI at the Timonium Hamfest.

Uriah - N3UFN has a new job as a DJ at Radio Station WPWC 1480 AM. Bob - KC3VO did a ATV demo for the Alexandria Radio Club in April. Skeeter - WA3UDY bought a packet TNC and he will try his luck for the first time in that area. Burnie - WD40 shows us his great VCR tapes with beautiful color. Bruce - WA9GVK has been quite involved in his model railroad layout design and is using solid state devices for his relays.

My son Rick - KB8SPV who lives in the Cleveland Ohio area likes to cruise the Internet had came across some good ATV information that he sent to me. One article showed some pictures taken with a mini ATV camera mounted on a remote controlled model helicopter. Another article was about a successful ATV balloon launch. The balloon was caught up in the jet stream and ended up about 500 air miles from the launch site. Several of our club members had the same kind of ideas and would record the ATV down link to a VCR to show on our nets.

Did you know that if you have a cable ready TV set, and most of us do, you can select channel 60 and with a good UHF outside antenna you have a real good chance of tuning us in on our ATV nets. For 420 thru 450 MHz is channels 57 thru 60. Also a cable down converter box should accomplish the same task when hooked up to an outside UHF antenna. Commercial down converters advertised in the Ham magazines go from \$49 to \$89. Of course if you may find a cheaper one at your local hamfest. Should you have the ability to see us we would like to hear from you. Please contact us on the telephone numbers listed or contact us during our net time on 144.970 FM simplex. The ATV repeater can be seen in the Baltimore area so you may have a reasonable chance of seeing us.

I'll be "seeing you" 73's Rich - KA3BTD



**The Mid-Atlantic
DX and Repeater
Association**

Meetings: Second Thursday of each month, rotating locations among Hagerstown MD, Frederick MD, Martinsburg WV and Greencastle PA. Next meeting is Thursday, March 14, 1996, at Subway Seafood House in Hagerstown MD.

Net: Tuesday evenings at 1930 local on 147.06.

Tech/Ops Forum: Wednesdays at 2030 local on 147.06.

Repeaters: Frederick MD: 147.06, 224.20, 448.125; Martinsburg WV: 147.345.

Mailing: 230 North Potomac St., Suite 2A, Hagerstown MD 21740

Information: Voice BBS 301-416-8447 (info Box 112) LandLine BBS (301) 416-8435

So, did you have a busy June? MADRA members barely took the time to recover from May's activities. We'd had a cold, windy and wet time at the Damascus Duathlon but all events ended

with the runners and riders safe. Then some of us were back in the Damascus countryside a couple of weeks later on May 18 for a series of bicycle races which fielded a large number of riders. Some of us made the bicycle scene and others made the Dayton HamVention scene. Either way we needed to rest in early June, but there just wasn't time.

June's first weekend had a group of volunteers scheduled to prep the Field Day site early. Why? Well, so we could break it in right by running our multi-op UHF/VHF contest station from there on the SECOND weekend in June. We were sure that two days of contesting would work out all our Field Day gear except for HF and see us readier than ever. You'll have to read next month's column to learn if our strategy was a good one.

Our Tech/Ops Forum, started in April, has had a slow start. We had begun meeting at 1930 local on Wednesday nights, using the 147.06 repeater. In June we scheduled a shift to 2030, hoping that would bring in the lawn and garden slaves after they tire of fun and games outside the house. We also started a more serious search for guest speakers to upgrade the technical level of the forum.

June's meeting was scheduled for Gaithersburg, but at this writing it's hard to know if the word got out to enough members to make it one of our usual festive gatherings. In July we will be meeting on Thursday July 11th but you'll need to check in on our BBS or 2M net to find out the location. By the way, the MADRA evening training class for Tech to General upgrades should not be too far along if you'd like to become a late joiner. It's meeting Wednesday nights in Frederick; leave voice mail at Box 112 if you'd like get the details and join in the training.

Don't forget MADRA's second HamFest: SweatFest'96. This will be in downtown Brunswick, Maryland, on Sunday, August 25th. A HamFest with a difference: things of interest to the whole family.

73 DE N2CSQ/3



Montgomery Amateur Radio Club

Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Bldg, Montgomery Co. Govt Center, 101 Monroe St, Rockville. Park in underground lot G-2.

Repeaters: 146.955 (-600) & 442.750 (PL 156.7) in Rockville.

Club Net: 2nd 4th and 5th Wednesdays of each month at 7 p.m. on the MARC repeater and 7:30 p.m. on 28.450 MHz.

Mail: MARC, P.O. Box 611, Gaithersburg, MD 20884-0611

Information: Jeff - KZ3F (301) 258-0112

Training: Ms. Rocky Jones (301) 216-5210

The Washington DC area is no stranger to elaborate program preparation. Presidential inaugurations, state dinners, you name it, at one time or another it's been done here in the Nation's Capital. Events that take extreme attention to detail, rehearsals, etc.

Perhaps no event comes to mind that even comes close to the intensity and pre planning that the Montgomery Amateur Radio Club has put into this year's field day event. When you read this column the event will have already taken place and of course, you will already know how significant a showing our club made to the overall fingerprint of the exercise. Never the less, we need not boast too much. Actually, we are saving that for the next MARC meeting.

At our next dinner meeting, (July 3, 1996 - O'Brien's Restaurant in Gaithersburg) why not come on over and meet with members of the MARC club, and listen in on the stories of amazing performance demonstrated during field day. If you can't make it, watch for future columns in this magazine, since we are committed to getting as much mileage out of this as we can. (A bit of writing humor).

Moving on, we are happy to report that progress continues with the club's 1996 efforts to meet the ever changing needs of our 300 plus members. For example, it is fair to say that our Sunday Night 2 Meter Net is a success. Why not join us on Sunday evenings on our 146.955 repeater at 07:30 PM? If you have not listened in before, you may not know that we broadcast "Amateur Radio Newslines." This program downloaded off the Internet on Saturday evenings, is most informative and very well produced. Other highlights of the net include segments to talk about items for swap or sale, and a chance for participants to find out what is going on in and around the MARC Club.

With the year half over, our emphasis on communication continues on. The MARC Internet home page works around the clock to disseminate information about our club. Recently added are new features to the page. For example, you will now have access to several amateur radio related public domain or shareware software programs available for downloading. Why not see what you might need? Just remember to turn off your call waiting before going on-line! On a more serious note, we are using the club home page to post a news bulletin received from the ARRL which is of importance to everyone in the hobby. The bulletin deals with a proposal pending that will jeopardize two popular amateur radio bands. You are encouraged to learn more about this and prepare to write a letter, send an e-mail and get involved immediately. This is a very important initiative.

In the world of packet communications, the MARC club is constructing a 2 meter and 440 node to pass packet data at 9600 baud. This node will help pick up the slack we anticipate when the DCA packet node closes down.

As the calendar races through the third quarter of 1996, preparations now begin for club involvement in Gaithersburg Old Town Day, and the Gaithersburg FARFEST. Find out more about the MARC club on the Internet at <http://www/dsport.com/marc/>. Let us know what you think.

73 N3TOU



Mount Vernon Amateur Radio Club

Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308.

Nets: Every Tuesday at 9:00 p.m. Starts on 2 meters then moves to 10 meters on 28.408.

Repeater: WD4PDP 146.055 input / 146.655 output.

Mailing: Mt. Vernon Amateur Radio Club (MVARC) c/o Joe Salemi KR4CZ, P.O. Box 7234, Alexandria, VA 22307.

Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466 or Packet 145.650 KD4LST-1.

April ended with another successful QRP Field Day. While the overall score wasn't very high, a good time was had by the dozen members who showed up to help set up, kibitz, operate and eat lunch...not necessarily in that order. Thanks to Steve, WB4EEA, and Frank, AA4ZS, for bringing out the equipment, and a second thanks to Frank for the lunch.

May started off with nine members attending the ARES & American Red Cross emergency operations seminar, held at Red Cross Headquarters in Falls Church. Two members, Frank, N4GUS and Steve, WB4EEA presented material at the event. Seminar topics included net operation, message handling, field stations, Red Cross Disaster Management and Communications orientation and a tour of the Emergency Operations Center. A Humvee communications and emergency support vehicle was on display for inspection.

May also marked the resumption of operations at the U.S. Coast Guard MARS station NNN0NCG. Rick, WC4Q, the station's trustee along with Chris, KD4IDI, and Vince, KE4SKW, put the station on the air and worked phone patch

traffic with the fleet. The training program for additional operators will begin shortly. With June comes Field Day. On June 8 a team of club members surveyed the site to be used for this year's outing. The event will be held at Camp Wilson, the Boy Scout area near Pohick Park.

The recent Club election introduced the officers for the upcoming year. John, WZ4A, was chosen as the new president. Frank, AA4ZS, will be the vice-president and Glenn, W4OCC, and Joe, KR4CZ remain as secretary and treasurer, respectively.

The antenna for the 146.655 repeater was replaced in May with a Hustler Dual Band model. A dual band configuration was selected with an eye for future addition of a link for a remote receiver site, now in the planning stage. Thanks to Jim, WD4PDP, Frank, N4GUS and Steve, WB4EEA for making the change. The new antenna has a slightly different radiation pattern, so new RF holes are being discovered and mapped, but the overall performance has been good, and is a lot quieter.

Ham radio played an important part of the recent Scouting On The Mall outing. Club members KD4CNS, KE4BAE, WA4USB and members of Club-sponsored Explorer Post 80 were operating a station when bad weather threatened the event. After monitoring SKYWARN and NOAA broadcasts they advised the event staff of impending severe weather, allowing the event to be secured before the heavy rains and winds arrived.

Remember: Anyone attending the Club's July testing session should verify the location and time of the exam. July is scheduled to be start of testing at a temporary site while the Lee Park location is renovated.

Club members will be providing communications support to the July Fourth celebration and fireworks display at Lee Park.

Have a Happy Holiday! 73, Chuck, W3HSW



Northern Virginia FM Association

Meetings: Fall, Winter & Spring

Weekly Nets: NVFMA, Wed, 8 PM, 146.79-ARES, Sun, 9 PM, 146.91. Equipment Clinic, 1st Wed of the month, 7:30 PM, 146.79.

Repeaters: 52.37/53.37, 146.19/146.79, 146.31/146.91, 222.50/224.10 Xlink, 222.74/224.34, 449.75/444.75, 1272.1/1292.1.

Membership Info: Ann Herlich/KD4GSU, (703) 481-1458.

Mailing Address: NVFMA, P.O. Box 486, McLean, VA 22101.

IT'S THAT TIME AGAIN

We now have the opportunity to renew our membership in the NVFMA. Our financial support is needed to sustain this premier multi-repeater system.

NEW AUTOPATCH CODE

The new AP Code will be in effect July '96. You'll receive the new code promptly after payment of your membership renewal.

VOLUNTEERS PLEASE!

We could sure use your help in maintaining the repeaters! Preventative maintenance is always the preferred way of sustaining complex systems. Please let us know when (days and times) you would donate with other NVFMA members. The tasks are varied; as are the times (1/2 day to full day). It will give you a "good feeling" and an opportunity to see y repeater sites and equipment. Call any of the Board members to check work schedules. I'm sure Sam, KM401 and or Mike, KB4CVL would like hearing from you. You can call KB4CVL "any" time - day or night (late, very late).

73's, Gil, K7OR



Prince George's Wireless Association

Meetings: First working Tuesday of each month, 7:30 PM; American Red Cross bldg., 6206 Belcrest Rd, Hyattsville, MD 20782

Club Station: K3CEZ

Mailing: 4109 Kennedy St., Hyattsville, MD 20781

Information: Frank Holton - WA3ZMW
(301) 927-1245

The regular monthly meeting of PGWA was held on Tuesday, May 7, 1996, WA3ZMW, Frank Holton presided, Minutes of the previous month were read and approved and incoming correspondence and announcements were presented for viewing.

There will be a public service event held on Sunday, May 19, 1996 which members Or P.G. Wireless will participate as communicators. This is an annual event named as "CROP WALK". Participants in this walking and jogging courses, pledge themselves to cover certain distances for a donation by sponsors. Proceeds collected will be used to buy food and supplies to feed the hungry throughout the world. This charity event will begin at around noon time and end around 4:00 P.M, at the First United Methodist Church of Hyattsville, MD located at Queens Chapel and Belcrest Roads in the City area of Hyattsville. All are welcomed. Refreshments will be available.

PGWA will participate in Field Day exercises this year. During this months meeting it was discussed what portable power sources would be available and different modes of operating. A Red Cross video tape was shown on disaster response volunteer teams how they are assembled and the wonderful work they perform. Visitors are welcomed to our meetings.

73s, Ken Easton N3HLY



Quarter Century Wireless Assn. Shenandoah Valley Chapter #137

Meetings: Third Wednesday of odd-numbered months, at 12:30 PM; Carper's Valley Golf Club, 1401 Millwood Pike (Route 50 East), Winchester, VA; reservations suggested.

Information: Perry F. Crabill, Jr., W3HQX;
(540) 662-7526.

Mailing Address: 225 Milam Drive,
Winchester, VA, 22602.

E-mail: pcrabill.visuallink.com

Fourteen members and guests attended the meeting of QCWA Chapter 137 at Carper's Valley Golf Club on Route 50 east of Winchester, Virginia on Wednesday, May 15, 1996. A social period at 12:30 PM was followed by a buffet luncheon at 1 o'clock. The meeting was conducted by Secretary/Treasurer Perry Crabill, W3HQX, in the absence of President Walter Johnson, WA4HW, and Vice-President Charles Anderson, NF3X.

Guy Black, W4PSJ, passed around a Ten-Tec solid state regenerative receiver kit for "Show and Tell". It covers seven amateur bands, and has a very well-written manual. The circuit has an untuned RF stage to decouple the detector from the antenna, and sufficient audio output to drive a loudspeaker.

John Kanode, N4MM, Director of ARRL's Roanoke Division, discussed FCC and ARRL happenings. Gate 1 for Vanity Call Signs will open after May 31. Problems with the VE question pool has been straightened out by the FCC. A good part of the Amateur Radio Service is likely to be privatized in the next few years; ARRL will prepare position papers for dealing with this.

Perry Crabill passed around a fax message from member Ed Rich, K3THD, reporting on his new QTH in Trenton, Florida. He and Joan have fruit trees and a garden that is doing nicely. Some

antennas were already up, but his tribander was only eight feet off the ground, awaiting installation of a tower. They have joined local clubs and volunteer organizations, and love the area.

Ward Crabill, W3JGK, and his wife Dorothy visited the Rich's place in April. Their property is about 700 by 700 feet, allowing lots of room for antennas. Ward took several pictures which he passed around, including one showing the beam on the eight-foot tower section.

Perry Crabill called attention to the Historical Electronics Museum in Linthicum, MD, near BWI airport. He and his wife visited it in 1955, and looked over its collection of WW-II military radar and communications equipment. Perry especially enjoyed seeing a very comprehensive collection of all types of radio tubes loaned to the museum.

Leaflets were handed out showing how to reach the museum from the Baltimore and Washington areas. Hours are Monday through Friday 9:00 AM - 3:00 PM, and Saturday 10:00 AM - 2:00 PM. Tours are available for groups during museum hours, and at other times by appointment: call 410-765-3803.

Perry also described the National Cryptological Museum next to Ft. Meade, located on Route 32, just off the Baltimore-Washington Parkway. It has exhibits showing how codes and ciphers can communicate secret messages. The Enigmas, electromechanical cipher machines used by Germany during WW-II, are on display.

The program was a continuation of the March arrangement where members told of their early ham radio experiences when they first received their licenses.

Ethel Smith, K4LMB, said her first contact with radio was in 1922, when a rich neighbor who was a dentist invited neighbors to his house to listen to this newfangled gadget. In 1935 her Dad brought home an all-wave radio; hearing Morse code intrigued her enough to borrow a license manual, and she passed the exam in 1936.

Neill Woods, W4LOG, built a five-meter kit in 1937 without knowing that a license was needed. When he learned of this requirement, he practiced code with a buzzer and received his Class B license in 1938. His first rig was a 6L6 crystal oscillator. He belonged to the National Guard, and was given money to build a station to be used at the Armory in Winchester; this had a CW rig with a 6L6-T20-T55 lineup, and operated on 40 meters.

Ward Crabill, W3JGK, remembered his father building crystal sets, using a cylindrical coconut box for the coil form. He and his younger brother Roger took the FCC exam together and received the adjacent calls of W3JGJ and W3JGK in February, 1941. Ward was in high school at the time, and worked 500 stations before Pearl Harbor put US hams off the air.

The next meeting will be at Carper's Valley on Wednesday, July 17.

Perry Crabill, W3HQX
Secretary/Treasurer



Quarter Century Wireless Assn. Chapter #91

Meetings: Formal: Third Saturday of even-numbered months; 12:00 noon; Neighbor's Restaurant, Cedar Lane and Park Street, Vienna, VA. Ragchew/Informal: Third Saturday of odd-numbered months; 10:00 AM; Old Country Buffet, Fair City Mall, Fairfax.
Newsletter: Bi-monthly to all members.
Information: Dick Rucker (KM4ML), Secretary; 10426 Darby St., Fairfax, VA 22030-3603; 703-591-3279. Also on the VHF net.
VHF FM Net: Sunday 9 AM, 146.79MHz.

May, 1996, Meeting — President Tony Stalls (K4KYO) welcomed 24 people to our regular odd-month program and business meeting.

Ten-meter CW Net — Al Cammarata (W3AWU), Net Control of this brand-new net, reported that the net has met twice. It meets at 1900 local time every Thursday on 28.125 MHz. There were four participants for the inaugural meeting, and two for the second meeting. Al asked folks to join in, to spread the word that the net is open to everyone (that means you, too), and to let him know if there is a better time or day to meet. The purpose of the net primarily is to help Hams to improve their CW skills. Al does an excellent job of this in a relaxed and informal manner.

World Radiocommunications Conference — Tony (K4KYO) and Jack Kelleher (W4ZC) discussed a few of the questions likely to be brought up at this conference in 1999.

Joe Carr (K4IPV) — VP Frank Haynes (W4NUA) introduced Joe, our principal speaker. Joe presented information about the business of writing magazine articles and books for the Amateur Radio market, emphasizing the things that a prospective author should know.

Joe has been writing for the Ham audience since 1968 and has written 83 books and an uncounted number of magazine articles. He writes monthly columns for three different magazines.

Joe discussed such topics as the remuneration for magazine articles, the amount of revisions requested by the editors, and how to get an editor's attention with a "query letter." He explained how to tailor the article for a particular magazine and how to choose or exclude topics.

Joe provided details about book royalties, advances, the initial proposal, contracts, finances, photographs and artwork, liabilities, copyrights, manuscript preparation, and many other related topics. Joe's extensive knowledge of writing about Amateur Radio related topics explains why he is so successful at it!

Auction — Jack (W4ZC) donated a Bird wattmeter, a microphone, a TV alignment generator, a floppy disk holder, an ARRL

Handbook, and an ARRL Antenna Manual; these brought in \$67. Carl Gray (W4ACM) donated some selsyn motors and an RF power meter; these brought in \$19. Thanks so much, Jack and Carl!

Jack (W4ZC) also gave the chapter \$100. This was part of the proceeds of the sale of his B&W linear amplifier advertised in the January issue of our newsletter.

Three former members renewed their memberships, and Barnett C. "Jay" Jackson, Jr. (AF4O) joined the chapter. Welcome!

ar 73 de Jim, K4JAP



Shenandoah Valley Amateur Radio Club

Meetings: First and Third Friday of every month at 7:30 p.m. SVARC Club House 2921 Grace Street, Winchester, Virginia.

Repeater: 146.22 In/ 146.82 Out.

Net: Shenandoah Valley Emergency Net (SVEN) 7:15 daily on 146.22/146.82 Repeater.

Mailing: P.O. Box 139 Winchester, 22604.

President: Fred Wetzel (W4KRT).

Info: Irvin Barb, KD4BHV, 955-1745.

Internet home page: <http://www.w3ic.com/inet/svarc.htm>.

Greetings once again from the Shenandoah Valley! Despite the overly wet spring we've had this year, SVARC club members have hardly stood still long enough to get hit by rain drops!

May proved to be a very busy month for us. On May 11th Northern Shenandoah Valley ARES members, including many SVARC members, took part in ARES exercise "Operation Scramble". This local contest was modeled after the ARRL's June Field Day, with five counties in northern Virginia participating. Although, we awoke to overcast skies at 4:30 a.m. we were only dampened by one light shower. The Frederick county team setup

"camp" at our new repeater site in Northern Frederick county. From 2800 feet, you can see for miles. It was quite a breathtaking view. Other counties selected sites within their county boundaries, some on mountain tops and others on more friendly terra firma.

The Shenandoah Valley Amateur Radio Club, an ARRL special services club, was selected by the ARRL to participate in a pilot recruitment program. This program targets the newer licensed amateurs that do not belong to the ARRL.

A general meeting will be conducted on Friday May 24, 1996 at the SVARC club house for these amateurs. The meeting will be conducted by Ed Hammond of the ARRL, and the success of the meeting will be then evaluated by the ARRL FOR THEIR future recruitment programs. There were over 20 persons who attended the meeting. Approximately half of these people signed up at the meeting and the potential for as many as five more sign-ups at later dates.

I'd like to take just a second to remind you all that our hamfest will be held on August 24th. This year, I promise it will be better than ever! Quite a few vendors have already signed up. The Clarke County Ruritans have constructed another air conditioned building, and will once again be preparing their "Famous Barbecue Chicken and Beef", so stop by for lunch. Mark it on your calendars!

More on Field day in the August issue!

73 'til next month ...
de KE4QJT/Laura Stewart



Reminder - all submissions for

AUTO CALL

are due no later than
the 1st of the month prior to the
month of publication!!



Southern Maryland Amateur Radio Club

Meetings: 2nd Friday of each month at 1930 ET at the PG County Police, Clinton Station, 6707 Groverton Drive, Clinton, Maryland.

Nets: Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (+/-QRM); Thursday at 2000 on 28.447 USB.

Repeater: WA3YUV/R 147.15+, Cheltenham, Md. Autopatch to 911.

Mailing Address: P.O. Box 273, Cheltenham, Md, 20623

Information: Vic (WA3YUV) & Linda (KA3VNI), (301) 888-1388

You may remember that back in April Vic, WA3YUV, started a special Amateur radio training class which focused on encouraging younger folks to join the hobby by conducting a novice/technician program just for them. By this time we anticipate that we have added 8 - 10 new amateurs to the ranks. Our congratulations to our new amateurs.

Field day is now just a memory. Our thanks to all the members who braved the weather to come out to help with the club station at Cedarville State Park. There will be some interesting stories about this adventure to share at the next meeting.

Speaking of our next meeting, the July meeting is going to feature Claire Kennedy, W3MNU, who will be giving a demonstration on Computer Aided Design (CAD) of PC boards and schematics. This will be a real interesting meeting whether you homebrew or not. With no snow on the ground there is no reason not to attend!!

Vic, WA3YUV, is in the process of completing the assembly of the new voter the club received in late May. This voter is going to permit the installation of additional receive sites which will cover some of those "RF holes" we have around southern Maryland.

It is with very mixed emotions that we have to report that our president, Dave, KE3ID, has accepted a new position in Quantico, VA, and will be moving there as soon as he can sell his house. We are happy for his advancement but are also saddened that he will be leaving us. Of course the housing market may ultimately influence that decision. Isn't it amazing how some guys will put a promotion over their hobby. Thanks for all the things you have done for SMARC, Dave, even though it has only been a short time. Oh, we can't forget to pass on birthday greetings to Dave's harmonic, Hanna who will be 3 on July 14th. That's about old enough to start studying for her license!

Just a reminder that your annual dues should be in to the post office box before the end of July (this month!). Your continued support will help keep the improvements to the repeater coming as well as the new features like remote two meter sites and the 440 machine.

Enjoy your vacations and check-in on the repeater occasionally so we know how you are doing. And that is the big news from southern Maryland. Be careful in all your summertime activities, and we will see you next month.

73, Greg - WA3FSC



The Middle Atlantic FM and Repeater Council, Inc.

Meetings: Coordinating Committee (CC) normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue. Talk-in on 147.18.

Address: P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

E-mail: [HTTP://WWW.T-MARC.ORG](http://WWW.T-MARC.ORG).

T-MARC has a new Web Page on the Internet, thanks to the efforts of Bill, W8HNT, and corporate help from C3I. The Coordinating Committee

meeting schedule is posted on the calendar, and the agenda for the next meeting will be posted a few days before each meeting. You can get coordination forms, and even submit coordination applications via the Web! Our By-Laws, policies and procedures, and answers to some frequently asked questions (FAQ's) are also available. So stop by at "WWW.T-MARC.ORG" (don't omit the "-" in T-MARC!).

There was a good turn-out of frequency coordinators at the Coordinator's Forum on Sunday morning at the Dayton Hamvention. A status report on the organization and incorporation of the National Frequency Coordinator's Council (NFCC) was presented by several members of the Drafting Committee, and nominations for election of the first official Board of Directors were solicited (T-MARC has nominated Owen - K3LEW, Bill - W3EAO, and Van - K3CZ).

Speaking of the Hamvention, it was HOT! Based on the weather pattern here, I took plenty of cool weather clothes. But "just in case" I took a couple of short-sleeve shirts. Needless to say, they got a workout! Oh, well - you can't count on Mother Nature! Anyway, I had a great time at "Mecca". EVERY ham should go to Dayton at least once - just ask someone who has been there!

During the past few months, we have received Certificates of Operational Status for several new repeaters. Just a reminder to sponsors of new machines that they must notify us in writing when their new machines become operational, so our database doesn't fill up with "paper" repeaters. And if you know of any repeaters which are not in operation, drop us a note so we can check them out.

The Boy Scouts of America will be holding their big Jamboree at Camp A.P.Hill, Va, with thousands of Scouts from all over the nation during late July and early August. As in the past, they plan to operate temporary repeaters at the site on 2-Meters and 440 MHz. The 2-Meter machine will probably be on the SNP frequency pair (144.57/145.17 MHz). So, for anyone else who might also

be operating on this pair, let's be kind to the Scouts while sharing these frequencies, and do our best to welcome them to our area.

73, Gary, W3DTN, T-MARC PIO



Vienna Wireless Society

Meeting: 7:30pm second and fourth Fridays of the month at the Vienna Community Center.
Nets: Pow-Wow nightly at 9 pm. on 28.444 MHz Slow speed code, nightly 8:30 pm on 28.390 MHz. Vienna Emergency Net, Wednesday 7:30 pm 146.085/146.685
Repeater: K4HTA 146.085 in/146.685 out
Information: Paul, AB4CY, (703) 560-2779
Mailing: P.O. Box 418 Vienna, VA. 22183

About a dozen club members made the pilgrimage to Dayton this year. Traveling alone or in a caravan with handhelds on the club simplex frequency for company. The diehards made their reservations for next year before leaving town for home. Ray, K5RJ, has been making the trip for more than 20 years.

Barney, WA4HIM, and Norm, KB4VCV, put in more than a twelve hour stint at the Loudon bike-a-thon this year. It turned out to be one of those unusually hot weekends that took a heavy toll of bikers.

We had two fun programs this month, both carried out by Bernie, K4XY. The they were in the form of contests. The first one was to see who could identify the most emission types commonly heard on the ham bands. Bernie had recorded ten different emissions sounds as heard from the speaker of the receiver and dared the group to tell the difference between Amtor and Pactor! Nobody got them all, but then high speed Morse and RTTY don't sound that much different, do they? The other program was a coil winding contest where everybody was given a hank of wire, a coil form and a disc cap of known capacity. The trick was to wind a coil and compute the resonant frequency of the combination and then submit the unit for measurement. Only a few had forgotten how to solder over the years. The best "guess" turned out to be only slightly more than one percent off. We say guess because the disc caps were ten percenters! At any rate a good time was had by all.

Field Day prep is in full swing. Doug, N1DEB, is heading up the effort this year. It's a good thing he took a good look at the calendar since Field Day is the fourth weekend in June, not the last weekend as it usually is. A hasty call to the Park Authority reserved the right one. A few years ago Lou, KQ4EY, raised the question of the definition of a "blue" moon on the club Pow-Wow net. A blue moon is the second full moon in the same calendar month and June this year was one of those months, hope you didn't miss it!

73's Paul, AB4CY

Chambersburg Special Events Station

W3ACH, the Cumberland Valley ARC, will operate a "Special Events Station" to commemorate the 132nd burning of Chambersburg, PA by confederate forces on July 30, 1864. The station will operate from 1200Z to 2100Z on July 20th. Operation will be conducted on the following frequencies: 3.870, 7.240, 14.250, and 147.12. For a certificate, send QSL and a 9" X12" SASE to CVARC, P.O. Box 172, Chambersburg, PA 17201.



This photo was taken at the May 8th FAR meeting in Alexandria, Virginia. How many FAR reps and officers can you identify? (Hint, the Foundation President and Executive Vice-president of the FAR are on the left and right ends, respectively, and the editor of Auto Call is kneeling). If you can't identify more than 3 people, perhaps you should plan on attending the next meeting!!

DX DX DX, from page 17

As mentioned before, 5A1A QSL's are now acceptable for DXCC credit. The last piece of proper paperwork was received, which confirmed the operation of this club was approved by the Libyan government.

The Willamette Valley DX Club will hold their 1996 DX Convention in the Monarch Hotel in Clackamas, Oregon on July 19, 20 and 21. More information is available from Ron Hylton, AD7L, PO Box 7296, Aloha, OR 97007-7296.

KU9C is offering a unique service. He is offering to QSL via the Bureau on an E-Mail request. He handles QSL's for BV9P, FM5DN, VR2GO, YO6JN, XX9AS, XX9AW, XX9JN, XX9X, 9M8X, 9M6BH. If you need a card for any one of these stations, just send Steve an E-Mail

message with a complete record of the QSO to KU9C@AOL.COM and he will send you the card via the bureau.

The W9DXCC Convention will be held on September 7, 1996 at the Holiday Inn in Rolling Meadows, Illinois. For info, contact Phil Camera, KB9CRY at 708-3431696 or at IPHIL@AOL.COM.

On May 4, 1996, the German DX Foundation was founded in Lampertheim, Germany. Any inquiries can be sent to DK7NP at RUDI@BLITZ.DE.

The recent Kermadec, ZL8RI DXpedition was a big success. They seemed to be on all the time and on many bands. I got them on 80, 40, 30, 17 and 12 meters. I am sure this one has moved way down the most wanted list.

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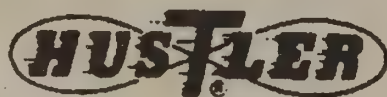


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Estate sales for Widows assistance handled by a FAR club will be published without cost.

Your full name and address must be provided with each ad but need not be published. No ads will be accepted over

the telephone and all ads must be prepaid. Ads that will be running for longer than 1 month must be accompanied by a letter stating the length that the ad is to be run. Since no effort is made to investigate advertisers, no warranty can be implied. Copy **MUST** be received by the 1st day of the month prior to the month of publication. Send all commercial and non-commercial advertising and Shack Sales to:

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(301) 855-0198

FOR SALE: 450 Plus TV tubes NIB with RCA tube rack, \$200.00. Pick-up only. Phone (540) 338-4152. K4LJH. Charles T. Preston, 48 N. Ivandale St., Hamilton, VA 22068. [07/96]

WANTED: For museum - pre 1980 microcomputers - also wanted early sales and microcomputer magazines. KK4WW. (540) 231-6478. P.O. Box 341, Floyd, VA 24091. [03/97]

FOR SALE: Henry 8K amplifier (hf) very nice condition \$4,500.00. KK4WW. P.O. Box 341, Floyd, VA 24091. (540) 231-6478. [08/96]

FOR SALE: Yaesu FT-757 MKII Xcvr with FP-757HD Power Supply \$650; Drake R-4245 Receiver with desktop cabinet \$1100; extra desktop cabinet for same (for rack-mounted radio) \$100; KLM 2422C (145 MHz) and 435-40CX (435 MHz) OSCAR antennas with three fiberglass poles \$200; antenna tripod roof mount \$15; Create CR-30 9'10" roof mount with thrust bearing \$150; Create CLP-5130-2 VHF/UHF log periodic antenna \$70; 2 M and 440 MHZ cubicle quads both for \$25; Toki antenna end piece (whoever bought

the antenna please call). Sig, WA9INK, work/voicemail (703) 875-5214, QTH (202) 467-0053 fax on line- hold for voice pickup. [07/96]

WANTED: 75TH tubes, new, or good used. Also, wanted: older tube radios, Collins, Hallicrafters, Hammarlund, National, Johnson, etc. Charlie, K3ICH, near Leesburg, VA (540) 822-5643. [07/96]

FOR SALE: Heavy Telrex 500 RIS rotator, double worm gear drive, rotating power 5,000 in/lbs!! with 150' cable and matching selsyn compass display, \$1000. (Current equivalent prices from Telrex are over \$4000!! Charlie, K3ICH, near Leesburg, VA (540) 822-5643. [07/96]

FOR SALE: 14AVQ vertical with manual, \$65.00. Racal RA6772 receiver with service manual, make offer. Racal RA6790/GM subassemblies and parts. K3CHP. Riverdale, MD. (301) 459-0084. [07/96]

FOR SALE: Kenwood TS 130S w/pwr sup, \$550. Butternut vertical antenna HF6 w/mod, \$95. Linear amp, Yaesu FL2000B, \$425. Vintage hand keys + several vibroplexes. Bill, (703) 536-5994. [07/96]

FOR SALE: YAESU FT-703R 440MHz Handheld w/ standard duck, wall charger and standard battery pack. \$100. YAESU FT-103R 220MHz Handheld w/standard duck, wall charger,original manual and standard battery pack. \$150. YAESU FT-33R 220MHz Handheld w/ standard duck, wall charger, 12v 600mAh high power pack, original box and manual \$175. YAESU PA-3 Mobile Power Adapter (for FT-103 or 703R), \$25. HUSTLER 220MHz 5/8 wave magmount antenna w/15' cable, \$25. 440Mhz 4 element directional antenna, \$45. All equipment listed above is in excellent condition. Please contact in the evenings: Jeff Potter, KD4NEX, 4506 East Marcia Court, Alexandria, VA 22039-3928. (703) 360-1955 (before 9 PM).

[07/96]

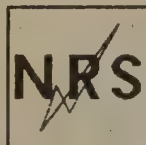
FOR SALE: From the estate of W4IIA: Patcomm PC-1610 HF transceiver, digital mode operation, 160M-10M (internal TNC) 75W out, CW, FSK, SSB, with manual, hand mic, power cable, \$750.00. MG Pro series PS-22 power supply for Patcomm 1610, \$60.00. Clegg FM-88 2 meter transceiver with mic and manual, \$115.00. Clegg PS-12A power supply for FM-88, \$35.00. Knight P-2 SWR/power meter, \$10.00. Ten-Tec 239 dummy load 50 ohm, 300 w max, \$20.00. Kenwood TR-2400 2 meter handheld w/mic, manual, battery charger, batteries. Inoperative, good for parts, make offer. Call Bill, W3WON (301) 460-4677 (Rockville). [07/96]

WANTED: Apple I microcomputer for museum, KK4WW. (540) 231-6478 / 763-2321. [06/97]

FOR SALE: Henry 8K hf amplifier, very nice condition, \$4500. KK4WW, (540) 763-2321.[08/96]

FOR SALE: Kenwood TS 940, (high serial number) with CW filter, excellent condition, \$975.00 obo. Ameritron AL-811 watt linear amplifier, new, \$500.00. VCI Vechtronics 1500 watt antenna tuner, new, \$300.00. Carl, W4ACM, (703) 360-4373. [07/96]

FOR SALE: Icom AT-500 automatic antenna tuner. Interfaces with most Icom HF rigs. Excellent cond. \$375. John, KAØSEY.(301) 855-0198.[07/96]



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[SWP]

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is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko, W9MOL, Amateur Radio News Service, 833 Park Plaine, Parke Ridge, IL 60067.

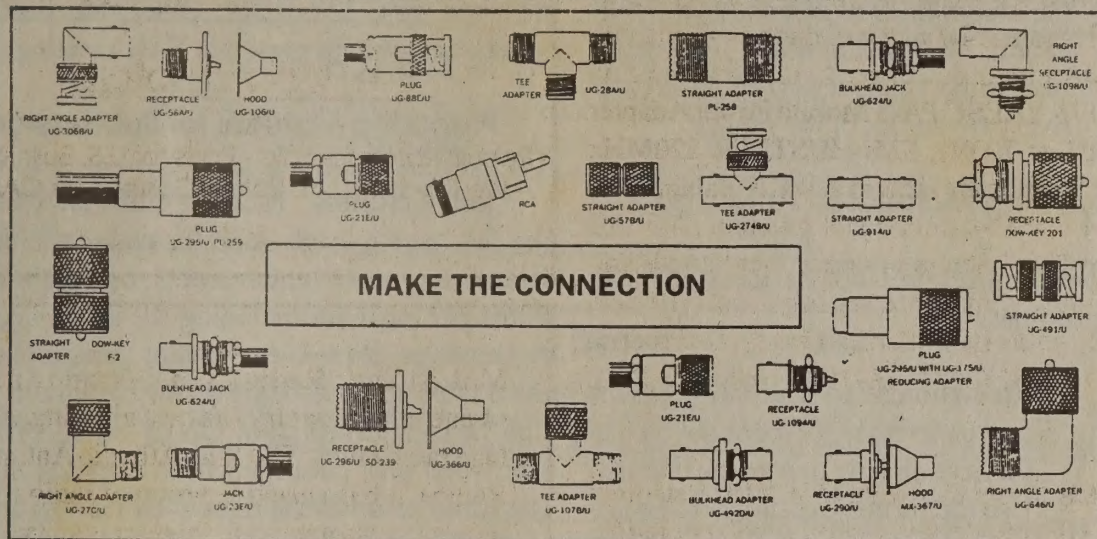
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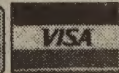
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Deadline: The deadline for ALL submissions to *Auto Call* is the 1st day of the month prior to the month of publication. When submitting via regular mail, time your mailing to ensure delivery by the 1st of the month.

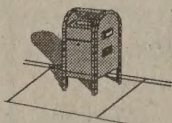
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Submissions for *Auto Call* will be accepted in the following formats:



Electronically: Submissions are accepted via any of the major on line services directly or over the Internet. Use the format exactly as follows:

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FidoNet - To johnqueen@aol.com<CR><CR>
GEnie - johnqueen@aol.com@inet#
MCI Mail - mbx: johnqueen@aol.com
Prodigy - johnqueen@aol.com



Regular Mail: Mail typewritten or computer generated hard copy to: John Queen, Editor, *Auto Call* Magazine, 755 Woodland Way, Owings, MD 20736. Ensure that your printed material is dark enough for scanning.



Computer Disk: Submissions are accepted on 3.5" or 5.25" computer disk, in either Macintosh or MS-DOS format, using Word, WordPerfect, or standard ASCII text files. Write your name, telephone number, and club name on the disk. Submit graphic files (club logos, etc) in an EPS or TIFF format. Please verify the readability of your com-

puter files before sending. If you want your computer disk returned immediately, include a SASE envelope with .32 postage. Otherwise, disks will be returned only in person at FAR meetings.

Preparing Material for Submission

Club Columns: Member clubs are allocated one full page in each issue for club columns. In determining space requirements, figure about 700 words per page not including the space taken up by headings, photos, etc. Indent paragraphs .25" and double space to begin a new paragraph. Send club header information ONLY when different from what was published from previous month. The editor reserves the right to edit any submitted material for space, content and/or applicability.

Hamfests/Events: Member clubs are allocated one full page per year to promote one club sponsored hamfest, convention, or special event. Submit clean black & white camera ready copy only by mail. Master copy should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary. Electronic submissions of Hamfest ads will not be accepted.

Photographs: The editor will select the best photograph submitted for the cover each month. Photographs should depict club members, club stations, or amateur radio related events that are current and noteworthy. Clubs may also submit photographs for inclusion with their club column. Photographs will be used in columns when space permits. Either B&W or color photos can be used. For each photograph submitted, write your name, phone number, and club name, along with a description of the photograph on a piece of paper, and tape it on the back of the photograph. Do not write on the back of your photo. If you want your photos returned immediately, include a SASE envelope with sufficient postage. Otherwise, photos will be returned only in person at FAR meetings.



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Roanoke Division Director
John Kanode, N4MM
Rt. 1, Box 73-A
Boyce, VA 22620
Phone: (703) 837-1340

Area Club Meetings - July 1996

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
	1 DOSARC	2 Antietam PG Wireless	3 BARC Montgomery	4 AnneArundel	5 Mobileers Shenandoah	6 Green Mtn.
7	8 Carroll Co.	9 Fauquier Frederick Woodbridge	10 FAR - VA	11 MADRAS Mid-Atlantic Mt. Vernon	12 VOA Vienna So. Maryland Alexandria	13 North Point
14 MetroComm.	15 OMHA Sterling Park	16 Antietam Arlington	17 BARC Goodard HEMARC Mont./QCWA	18 AnneArundel	19 Shenandoah	20 Capital City
21	22	23 Columbia	24 Moose Laurel	25 MADRAS St. Mary's	26 Central MD Vienna	27
28 Adventist	29 Green Mtn. T-MARC	30	31 Carroll Co.	 <i>Happy Birthday, America!!</i>		